



# THE ASSAM GAZETTE

অসাধাৰণ

EXTRAORDINARY

প্ৰাপ্ত কৰ্তৃত্ব দ্বাৰা প্ৰকাশিত

PUBLISHED BY THE AUTHORITY

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No. 335 Dispur, Monday, 9th May, 2022, 19th Vaisakha, 1944 (S. E.)

GOVERNMENT OF ASSAM

ORDERS BY THE GOVERNOR

DEPARTMENT OF HOUSING & URBAN AFFAIRS.

## NOTIFICATION

The 29th April, 2022

**No. UDD(T)174/2022/5-** In exercise of the powers conferred by the Section 9 and Sub-section (1) of Section 10 of the Assam Town and Country Planning Act, 1959 (as amended) and (Assam Act II of 1960) read with Sub-rule(1) of Rule 3 of the Assam Town and Country Planning (publication of Master Plan and Zoning Regulations) Rules 1962, the Governor of Assam is pleased to publish the following notice regarding the publication of the Draft Master Plan for Bokajan.

### Notice for Publication of the Draft Master Plan for Bokajan

1. It is notified that the draft Master Plan for Bokajan prepared under Section 9 of the Assam Town and Country Planning Act. 1959 (as amended) as described in the schedule below is hereby published.
2. Any person or persons affected by the Draft Master Plan may submit their objections or opinions in writing to the Director of Town and Country Planning within two months from the date of publication.
3. The Draft Master Plan with all relevant papers and maps may be inspected free of cost during the office hours at the office of the Director, Town and Country Planning, Dispur, Guwahati-6, the Deputy Director, Town and Country Planning, District Office- Diphu, office of the Chairman, Bokajan Municipal Board & Bokajan Circle office. Copy of the Draft master Plan is available at the office of the Deputy Director, Town & Country Planning, Dist office - Diphu for sale on payment.

**SCHEDULE-I****A. SITUATION AND AREA:-**

District: Karbi Anglong

Master Plan area: 44.04 sq. km.

Revenue Area included in the Final Master Plan of Bokajan

**1. Bokajan Town Area****2. Other villages included in the proposed Master Plan for Bokajan:**

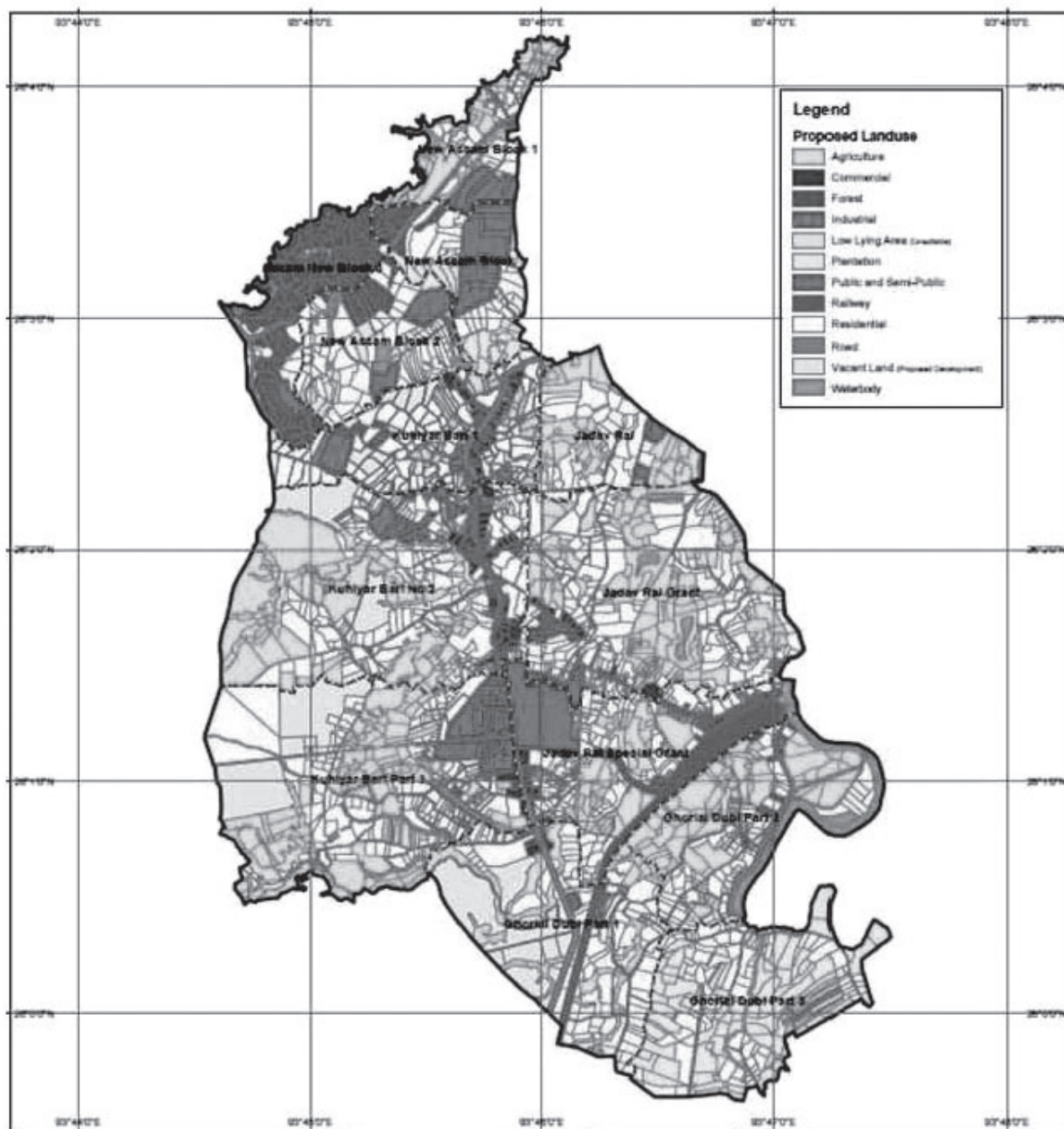
Villages		
Dimrolangso	Alubari	Ekorani
HamariHanse	Ganesh Nagar	Bormathi 1
Majgaon	BhitorAmrajan 2	Bormathi 2
GoromPani	KukiBasti	Kuhiyarbari 1
Manipuri Basti	BhitorAmrajan 3	EkoraniNeparpati
BhitorAmrajan	GhanshyamGaon	Jyotinagar
Sarthe Phangcho	RukasenGaon	Daporitoli
DoyalBasti	PuronaPaccha Ali	Bokajan Bazar
GurungMati	Beltola	TekeEngti
Kuhiyarbari 1 Rongkangthir	Kawaram Taro	Gharialdubi
Kuhiyarbari 2 Rongkangthir	BokajanBagan (Daroga)	Gharialdubi 1

**3. Description of boundaries within the Master Plan area**

- East- Alubari
- West-Dimrolangso
- North-HamariHanse
- South-Majgaon

**KAVITHA PADMANABHAN,**  
Commissioner & Secretary to the Govt. of Assam,  
Department of Housing & Urban Affairs.

## DRAFT MASTER PLAN REPORT OF BOKAJAN





**CHAPTER-1 :****INTRODUCTION****1.1 Location**

It is geographically located at 26.02°N 93.78°E, at an average elevation of 138m. Bokajan is one of the 6 statutory towns of Autonomous district of Karbi Anglong. It is 15km away from Dimapur and partially borders Nagaland. Bokajan is well connected with 2 National Highways, viz., NH-36 on the north and NH-39 on the east. The internal roads are covered by PWD.N. F. rail communication also makes the area easily accessible from various parts of the region.

With the commencement of the Indian constitution the district council was form on 23<sup>rd</sup> June' 1952 under the Sixth Schedule. Henceforth the council came into be called Karbi Anglong District Council. The Karbi Anglong District was formerly known as the Mikir Hills. The United Mikir Hills and North Cachar Hills was form on 17<sup>th</sup> Nov/1951. On 2<sup>nd</sup> January' 1970 Mikir Hills District was separated from North Cachar District by carving out some portions of Sibsagar, Nagaon and united Khasi and Jaintia Hills. Both the district was re-name from Mikir Hills District to Karbi Anglong District on 14<sup>th</sup> Oct/1974 and North Cachar Hills District. The Karbi Anglong is the biggest district of Assam with Geographical area of 10,434 Sq. Km covering about 13% of the total area of the state. The total population of 8,12,320(as per 2001 census with density of population 781 Sq. Km and literacy rate Male-68.11% and Female-48.65%. The Karbi Anglong District is situated in the central part of Assam between 25°32' N to 26°36' N latitudes and 92°10' to 93°50' E longitude. The district can be broadly divided into two physiographic units vize Hills and Plans. About 85% of the areas consists of valleys of the Jamuna, Kapili and the Dhansiri Rivers lying in its eastern part. Beside these three major rivers of the district other minor streams include Kaliani, Borpani, Patradisha and Digaru.

Karbi, a Tibeto-Burman stock is the predominant inhabitant of the district. The district is also inhabited by other hill tribes and people from the plains. According to 1991 census, the population of Karbi Anglong District is 6,63,000 and is dominated by Karbi Tribe. Besides Karbi Lalung, Dimasa Kachari, Rengma Naga, Kuki and Shyam occupy various pockets of the district and maintain their own ethnic identity.

No one can say specific history in relation to the origin of the name of the town. However, the name of Bokajan has commonly been derived from the Assamese language which came from "Buka" that means "Muddy" and "Jan" means stream. So, Bokajan means Muddy stream.

**1.2 Regional Setting**

Bokajan Master Plan area lies in the South-eastern part of Karbi Anglong district which shares its borders with the state of Nagaland and is 15 km away from Dimapur. The entire area consists mainly of plain region. The beauty of nature with wilderness of dense trees can be viewed from around 40 km away of Nagaland making it a tourist attraction. Karbi Anglong is a tribal district which is home to many tribes including Karbi, Dimasa,



Bodo, Mann Tai, Kuki, Rengma, Jayantia, Hmar and Adivasi. There are also people from Nepali, Bihari, Bengali and Assamese-speaking general community, Karbi being the largest tribe. Bokajan mainly consists of Bihari people making the region an urban centre for different communities. The Common language mainly used in Bokajan is Karbi and Assamese.

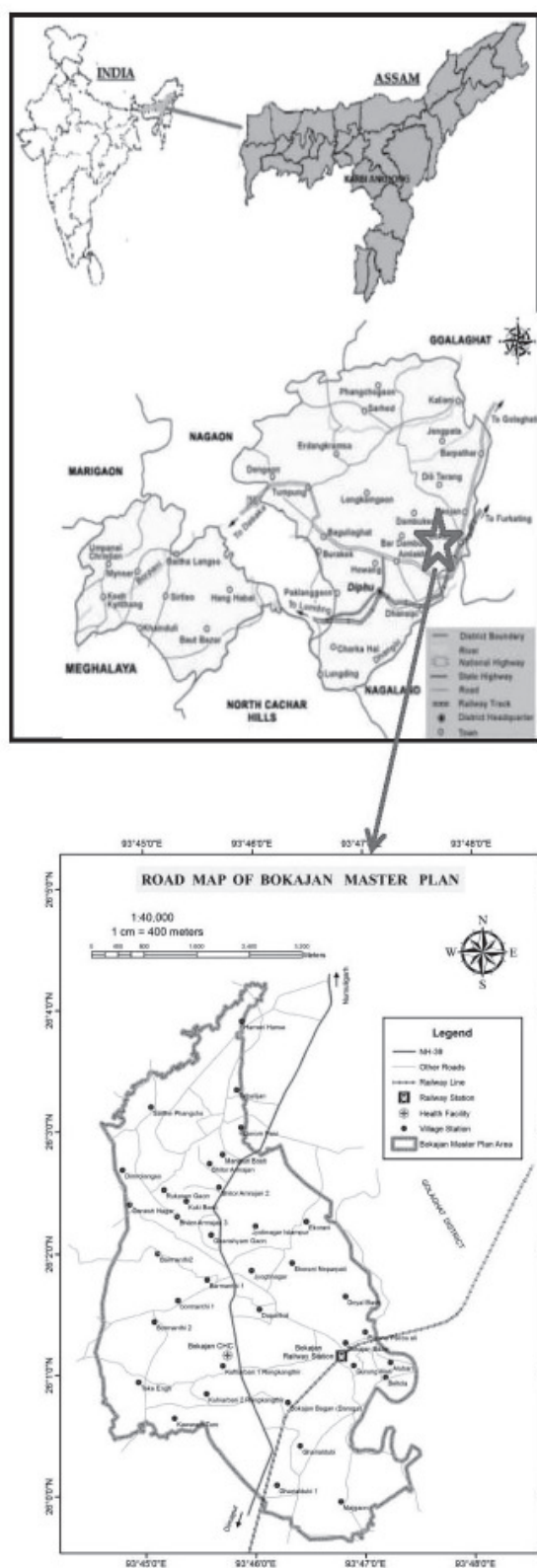


Figure 1: Regional connectivity of Bokajan with nearby states and towns

### **1.3 Brief History of the Town and Surrounding**

Bokajan Master Plan area lies in the South-Eastern part of Karbi Anglong district which shares its borders with the state of Nagaland and is 15 km away from Dimapur. The entire area consists mainly of plain region. The beauty of nature with wilderness of dense trees can be viewed from around 40 km away of Nagaland making it a tourist attraction. Karbi Anglong is a tribal district which is home to many tribes including Karbi, Dimasa, Bodo, Mann Tai, Kuki, Rengma, Jayantia, Hmar and Adivasi. There are also people from Nepali, Bihari, Bengali and Assamese-speaking general community, Karbi being the largest tribe. Bokajan mainly consists of Bihari people making the region an urban centre for different communities. The Karbi Anglong district is rich with underground resources like coal, limestone china clay, glass sand etc. The setting up of Bokajan Cement Factory to utilize the estimated 100 million tons of limestone deposited in Koliajan also adds to the regional setting of the place. Moreover, tourist destination spots like Deopani Mandir, Kachari Ruins etc. within 25km distance also adds to the attraction of Bokajan.

### **1.4 Climate of Bokajan**

The climate of Bokajan is sub-tropical with semi-dry summers and cold winters. Average humidity is about 75% and temperature ranges from 8°C in winter to 36°C in summer. Between December 2003 and November 2004, the average monthly rainfall in the area was 92 mm, with the highest rainfall recorded in July (256 mm) and lowest in February (9 mm). Due to differences in topography, climate varies within the region. The monsoonal climate begins from the month of May and continues upto October. June and July are generally the hottest months. The winter season start from the month of November and continue upto March. About 80% of the rainfall occurs in July-August. The prevailing wind direction of Bokajan is from North-East to South-West during the winter months while during the summer it is from South-West to North-East.

### **1.5 Topography and Soil condition of Bokajan**

Bokajan has moderately undulating topography, unlike the usual hilly terrain of Karbi Anglong district, situated at an elevation of 138m. Only narrow parts of plains found in this district are along the banks of the river Kapili, Dhansiri, Jamuna and Barapani. Dhansiri river is the prime reason for flood in Bokajan. Alluvial soil is found in this area with high quantity of organic matters and nitrogen. It is due to withering process of the hills of rest of the district, which being washed away by rain. Wet cultivation predominates in the plain valleys of Bokajan where paddy, wheat, oil seeds, sugarcane, fruits and vegetables are the main crops.





**Figure 2 : Topography of Bokajan master plan area**

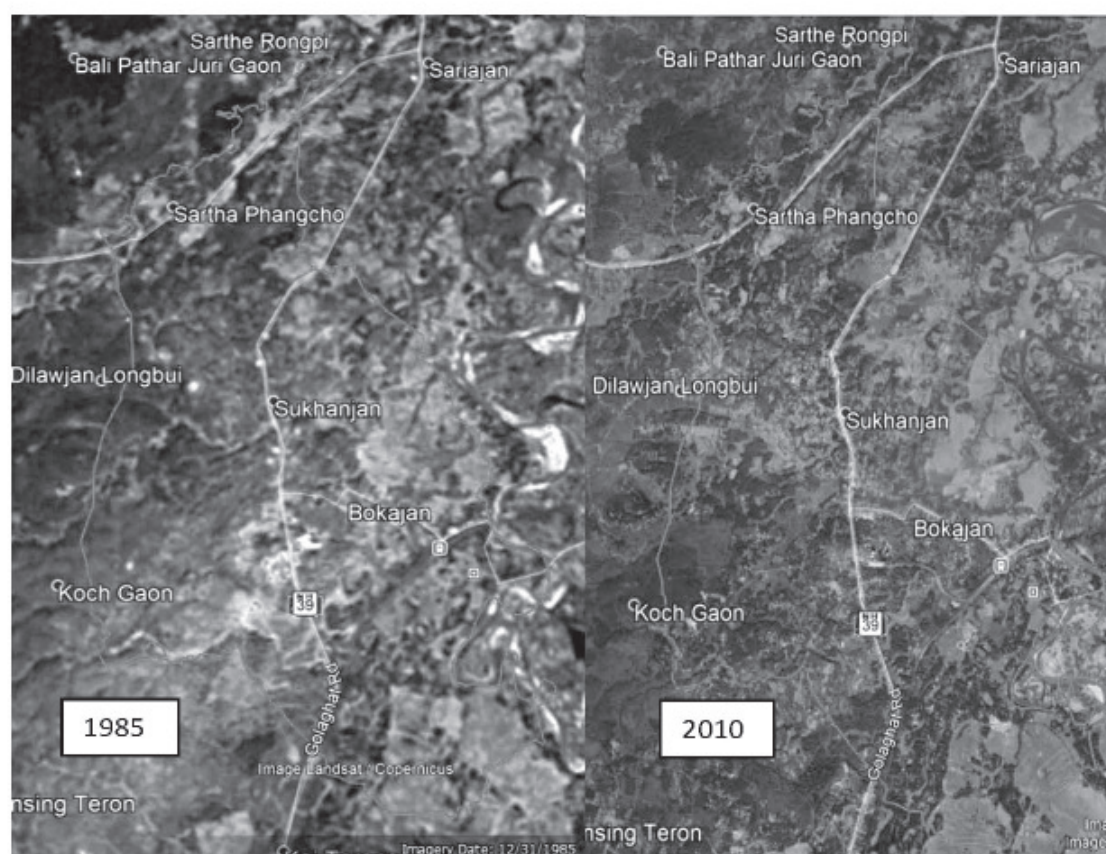
### **1.6 Rural-Urban Scenario**

Bokajan Master Plan area consists of Bokajan Town area along with approximately 33 villages. Bokajan town is divided into 7 wards and approximately 43% of the population live in town as per 2010 T&CP field survey. Bokajan is one of the very few trade centres of the district where people trade their own products at the local market and purchase their essential commodities for consumption locally. Out of 20 registered industries of the district, Bokajan cement factory is the largest. Informal market is seen in the master plan area, without any waste management, drainage or parking plan.



### 1.7 Physical growth of Bokajan

Bokajan Master plan area shows that there is a substantial growth towards the Western part of the area and a little towards the east. The NH-39 may be the prime reason for the reason of physical growth in West direction, whereas the railway line passing through the area can be a reason for the physical growth towards East. The Bokajan market is also found on the way to railway station. This analysis is done solely based on secondary source (Google Earth). Figure 21 shows the Physical growth of Bokajan Master Plan area from 1985 to 2010.



**Figure 3 : Physical growth of Bokajan Master Plan area from 1985 to 2010**

### 1.8 Need for the Master Plan

Bokajan was reorganization as an urban centre in the year 1988. It is a class IV town in Assam having a population 11025 as per census 1991 and 14938 per census 2001 with a decadal variation of 35.49. As per T&CP field survey in 2010, it shows that Bokajan Master Plan area covers a population of 25517 nos. with a density of 574.71 persons per sq.km. The town is experiencing an alarming rise of population due to the establishment of many educational institution, Government and semi Government office, Cement Corporation of India etc. Moreover, Bokajan is well connected with the rest of the region via National Highways and N.F. railways making it a potential urban growth centre. The boots of very

beautiful scenic and natural beauty also makes this town a potential tourist spot. But in this era of rapid and massive urbanization an approach is required outlining the issues of the region and to bridge the gap between the existing condition and the demand of the place for a sustainable physical, social and economic growth. Hence, in this hour of need, Bokajan demands a well organised Master Plan to cater to the need of the town as well as the villages surrounded.

## **CHAPTER 2 : DEMOGRAPHY**

### **2.1 Introduction**

Bokajan is a class IV town in Assam having a population 11025 as per census 1991 and 14938 per census 2001 with a decadal variation of 35.49%. Bokajan prove an alarming rise of population due to the establishment of many educational institutions, Government and semi Government offices, Cement Corporation of India etc. Study of population is one of the most important aspects in the planning process. A comprehensive study on growth characteristics is essential to assess future planning needs such as housing, physical and social infrastructure, economic features etc. and for the preparation of Bokajan Master Plan this parameter has been thoroughly studied.

### **2.2 Density Pattern**

In Bokajan Master Plan Area based on the existing trend of development, availability of building land, projected population etc. three density zone have been proposed. Residential use area of the proposed Master Plan are marked as 20% under high density, 25% under medium density and 55% under low density zone. The gross residential density of three different type have been identify for Bokajan Area are as follows-

- Low Density: <50 persons per hectare
- Medium Density: 50- 99 person per hectare
- High Density: >99 person per hectare

### **2.3 Population Distribution**

As per Field survey done in 2010 by T&CP, Diphu the total population of Bokajan Master Plan area is 25517 out of which 13151 nos. is male and 12366 nos. is female population.

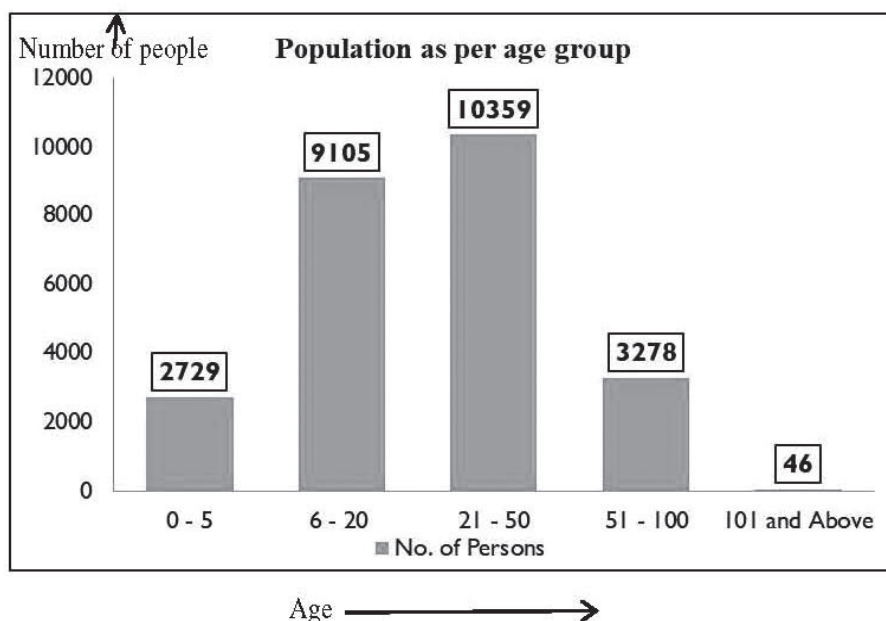
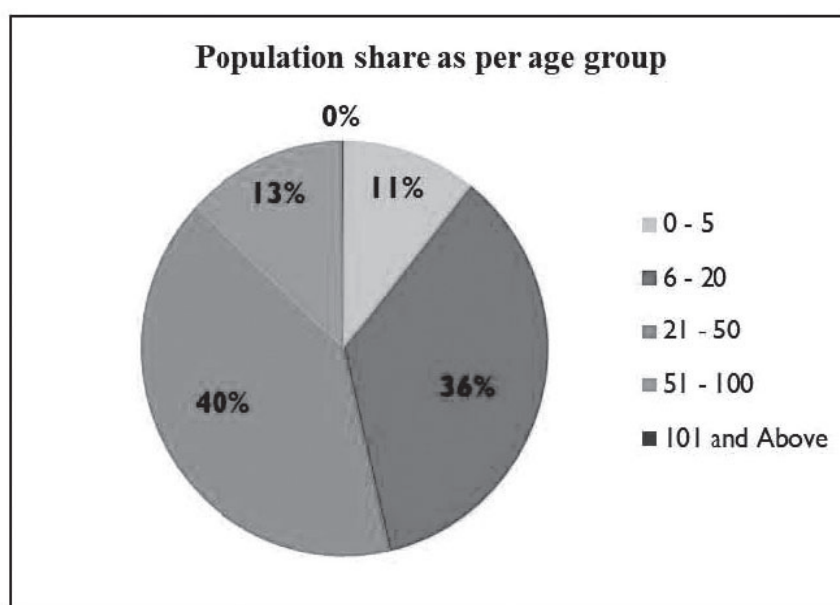


Figure 4 : Population distribution based on age group





**Figure 5 : Percentage Share of population as per age group**

## **2.4 Population Density**

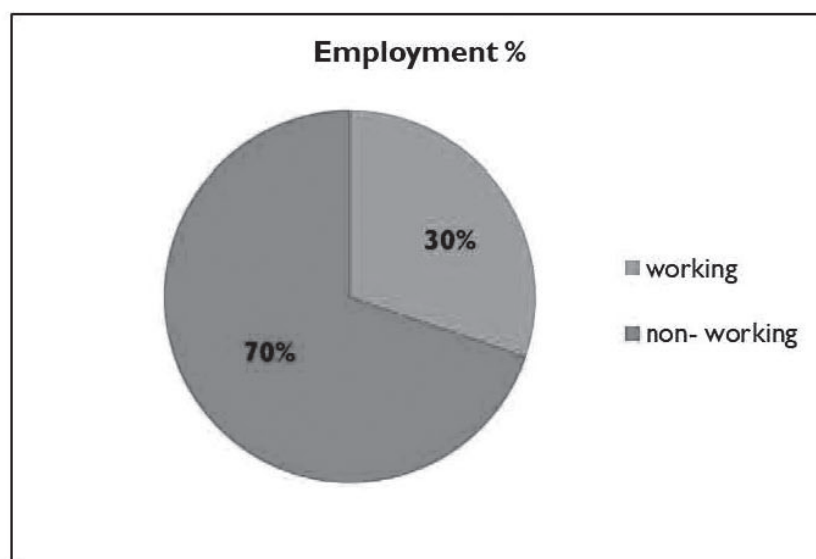
Population density refers to the number of people living in an area per square kilometre. Bokajan Master Plan area covers 44.4 sq.km of area with a total population of 25517, as per T&CP field survey report, 2010. The density of the Master Plan area is 575 persons per sq.km., which is 625% more than the district average of 92 persons per sq.km as per 2011 census. It can be inferred that the area is highly congested and there is need of housing.

## **2.5 Sex ratio**

Sex ratio is 940 female against 1000 male, which is equal to nation's average.

## **2.6 Working/Non-working population**

As per T&CP field survey 2010, Bokajan master plan area comprises of 4238 nos. of working population and 9794 nos. of non-working population. Only 30% of the population is working. This share of unemployment indicates that there is lack of opportunities in the area. The master plan proposal highly demands infrastructure to boost the employment generation of the region.



**Figure 6 : Employment share as per T&CP field report, 2010**

### **2.7 Dependent population**

Out of the total population of Bokajan master plan area, 45% of the population ranges between 0-14 years and 65years and above, as per T&CP field survey report 2010. Most of this 45% share is by 0-14years of population. This indicates that in the near future there is more youth percentage share to contribute to the employment of this area.

### **2.8 Household size and density**

Household size refers to the number of persons (irrespective of age) living as an economic unit. This does not require that they be in a physically separate housing unit. It is expressed as person per household. As per T&CP field survey report 2010, the average household size of Bokajan Master Plan area is 5, which is 4.45 for Nation's average in 2011 census. It is to note that high household size refers to congested living in a household. It can also be inferred that high household size means low per capita income. Bokajan Master Plan area covers 5103 nos. of household.

### **2.9Population projection**

Population projection refers to the forecasting of population in future based on present and past population data. It helps to understand the plan-policy need of an area in terms of physical, social, economic, environmental factors etc. For Bokajan Master Plan projection, past census data is not available. So, the population projection is done for the Bokajan T.C. area to give a basic idea of the proposed Master Plan area. It is done by Arithmetic method and Geometric Mean method. (\*sufficient data is not available for projection with Incremental

Increase method). It shows that by 2031 the population of Bokajan TC will be 35076 nos. approx. and in the next decade, 2041, it will be 45697 nos. approx. The Bokajan cement corporation of India (C.C.I.) project has been major factor for estimation of the population. Another factor is the border area of Dimapur City, because of which migration happens to set Bokajan as business centre.

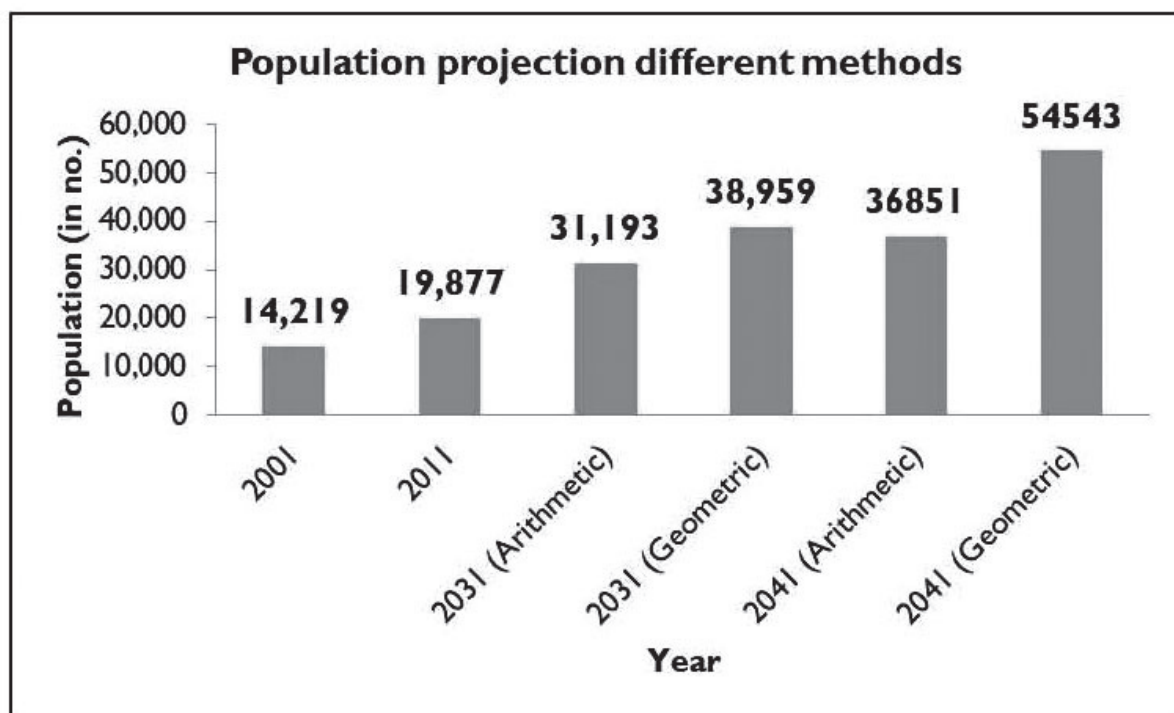


FIGURE 7 : Population projection till 2041 by Arithmetic Method and Geometric Mean Method



### **CHAPTER 3 : ECOMONY BASE AND EMPLOYMENT**

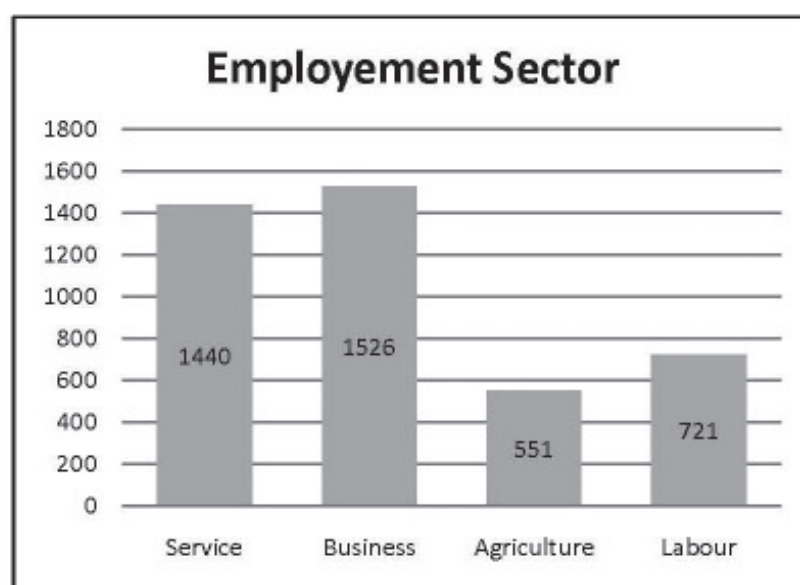
The economy of a region can be determined by analysing the Work Force Participation Rate (WFPR), Occupation structure, Employment status (regular employed, self-employed, casual labour, unemployed), Formal/ Informal sector etc.

#### **3.1 Occupation**

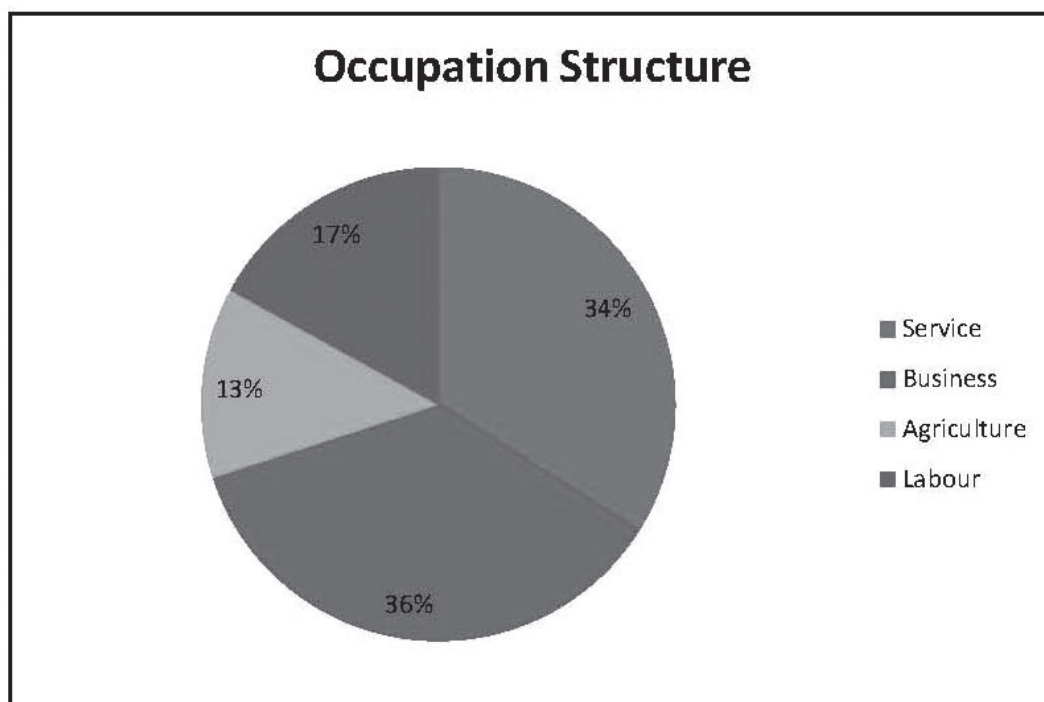
As per T&CP field survey 2010, Bokajan master plan area comprises of 4238 nos. of working population and 9794 nos. of non-working population. 36% of the working population is involved in business sector, 34% is involved in service and 30% in labour. This indicates that there is lack of opportunities in the area. The Master Plan proposal highly demands infrastructure to boost the employment generation of the region.

**Table No. 1 Working Population**

Sl. No.	Occupation	Total Nos. of Working Person	P.C. of Working Person
1	Service	1440	34%
2	Business	1526	36%
3	Agriculture	551	13%
4	Labour	721	17%
<b>Total</b>		<b>4238</b>	<b>100 %</b>



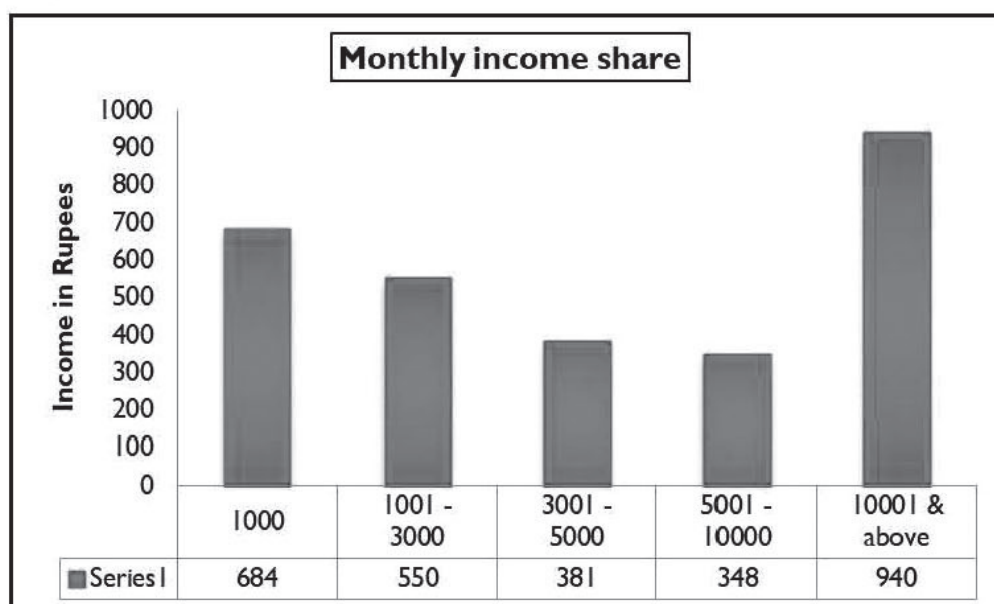
**Figure 8: Employment share as per T&CP field report, 2010**



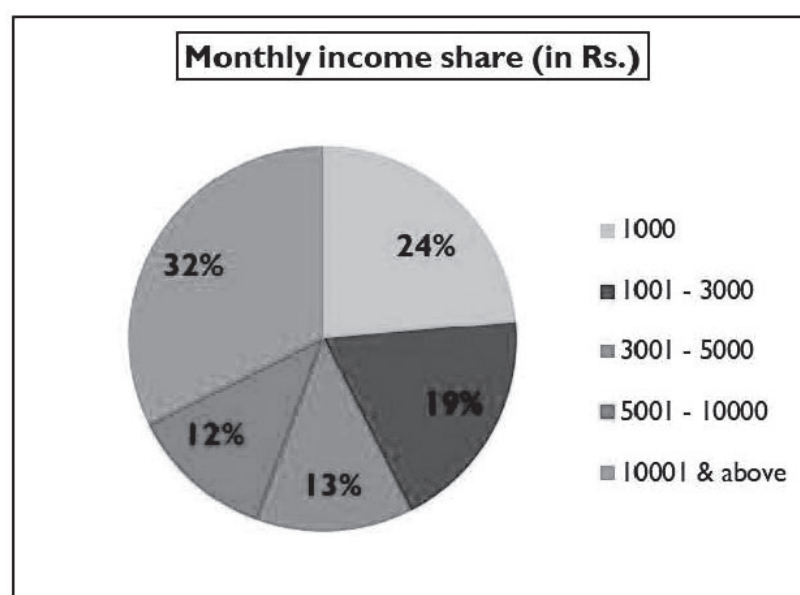
**Figure 9 : Occupation structure**

### 3.2 Income

As per T&CP field survey 2010, Bokajan Master Plan area comprises of 4238 nos. of working population and 9794 nos. of non-working population. The monthly income range is shown in Figure 10 below.



**Figure 10 : Monthly income range in Rupees (Rs.)**



**Figure11 : Monthly income share**

### **3.3 Industries**

Out of 20 registered industries of the district, Bokajan cement factory is the largest. There is no large industries in the Master Plan area except the Bokajan Cement Corporation of India (CCI) factory. There are few small and medium industries scattered in different part of the town. Survey shows there are six rice mills. As per survey conducted, there are 45 small industrial units functioning in the town. This indicates that there is lack of opportunities in the area.



**CHAPTER 4 : HOUSING AND SHELTER**

Food, cloth and shelter are the basic needs of a human being. The Master plan should show the location of various types of uses, densities, yields, and lot sizes. When developing housing, a variety of housing types, sizes, and tenures must be considered. In this context, the Master plan should also ensure appropriate housing density and diversity. The Master Plan should also be flexible enough to allow for change over time in housing diversity as communities mature.

**4.1 Housing scenario**

As per T&CP field survey 2010, Bokajan Master Plan area includes 3975 houses. Based on current population, there is a lack of 442 numbers of houses in Bokajan Master Plan area.

**Table No. 2 Housing Scenario**

Sl. No.	Type of House	Condition		
		Good	Fair	Bad
1	R.C.C.	225		
2	S.R.C.C.	525	260	52
3	Assam Type	619	378	189
4	Kutcha	714	647	366
Total		2083	1285	607

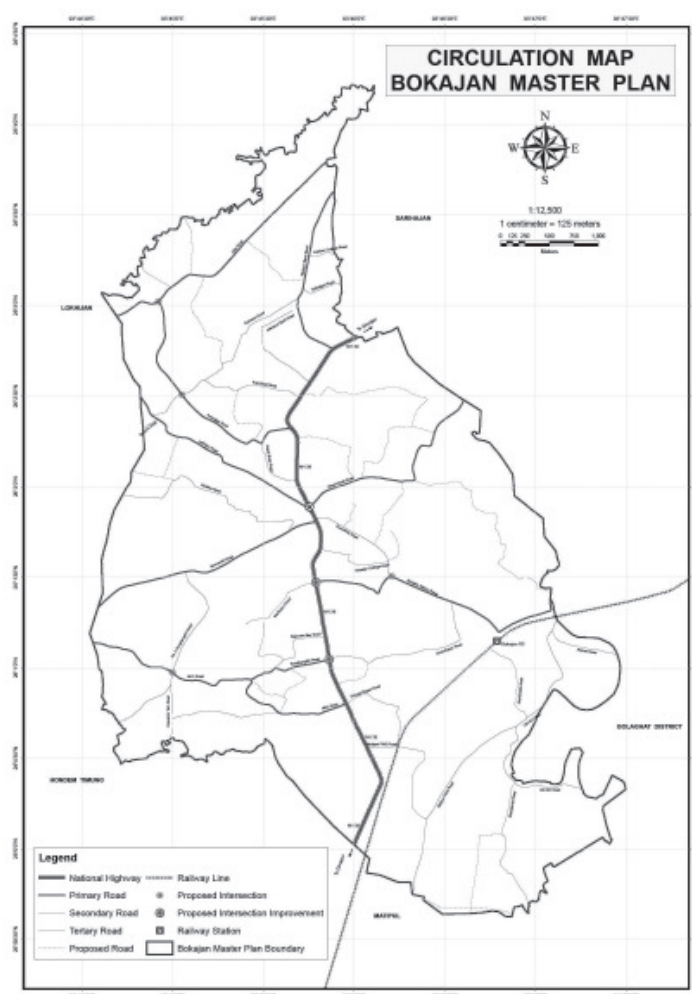
**4.2 Housing stock and need assessment**

Population projection till 2031 shows that there will be a need of additional 8157 houses. Also, there is an immediate need of 647 housing units to suffice the current population. Hence, to accumulate the overall population of Bokajan Master Plan area in 2031, there will be a need to 8804 housing. Single storied buildings in the few demarcated area within the Master Plan area can be restructured upto 1-2 more storied to avoid horizontal expansion. 6% vacant land as per T&CP Landuse Survey can be identified as suitable land for housing .

While taking building permission it is necessary for the residents to make arrangement for water harvesting system.

## **CHAPTER 5 : TRANSPORTATION**

Roads are divided into three segments viz. primary road, secondary road & tertiary road. Bokajan is well connected with National Highway-39, which passes through the Master Plan area. The width of the primary roads is 10m-15m. Now-a-days different bus services link the area with the other places within the state and country. Tertiary roads are the local roads/ streets within the residential areas/ semi-public areas etc. where width of roads is 4m-6m. These internal roads are covered by PWD.N. F. Rail Communication also makes the area easily accessible from various parts of the region. However, the transport and communication is yet to develop in the district including the Master Plan area of Bokajan.



**Figure No. 12 Circulation Map of Bokajan Master Plan area**

### **5.1 Modes of Transportation**

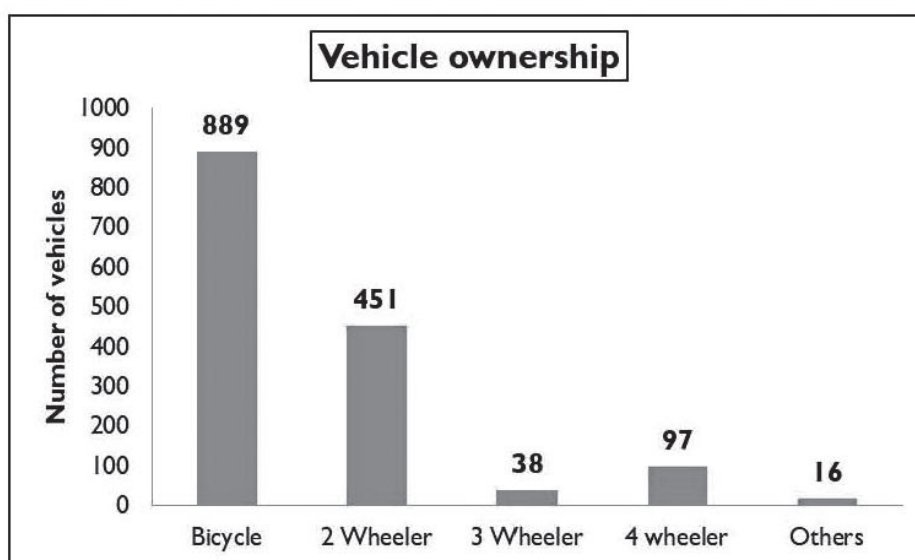
Roads and Railways are the primary means of transportation in this region. There is an Air service at a nearby city Dimapur (Nagaland State) which is just 10-15 Km away from Bokajan town. Private Taxi, Auto-rickshaw, Rickshaw, E-rickshaw are used as Intermediate modes of transportation.

## 5.2 Vehicle ownership

Vehicle ownership details help to plan and fund improvements to road and highway infrastructure, develop transportation plans and services, understand the preferable mode of transportation, evaluate pollution and access to transportation in emergencies. The availability of the following modes of transport - Bicycle, Scooter/Motorcycle/Moped, Auto-rickshaw/rickshaw and Car/Jeep/Van was ascertained. As per T&CP field survey 2010, only 29% of household in Bokajan Master Plan area have access to vehicle ownership. Out of the 29%, 60% is bicycle/tricycle for disabled person, 30% is two wheeler i.e. motor cycle/scooter/ moped, 3% is three wheeler, i.e., Auto- rickshaw/ van/rickshaw, 6% is four-wheeler, 1% is others including bus/truck etc. The existing bus system needs to be modernized and expanded to meet the travel needs in the coming years provided with good infrastructure support in terms of depots, terminals, stops etc.

**Table No.3 Vehicle Ownership**

Sl. No.	Type of Vehicle	Nos. of Vehicle	P.C
1	Bicycle	889	60%
2	2 Wheeler	451	30%
3	3 wheeler	38	3%
4	4 Wheeler	97	6%
5	Others	16	1%
<b>TOTAL</b>		<b>1491.00</b>	<b>100 %</b>



**Figure13 : Vehicle ownership in Bokajan Master Plan area**



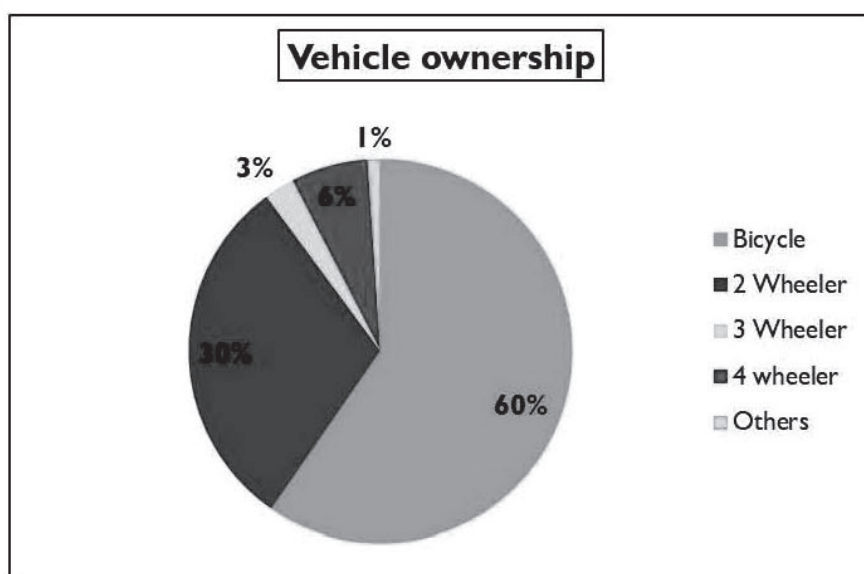


Figure14 : Vehicle ownership share

### 5.3 Road typology

Black top, Sand gravel, Earthen, Pavers block type of roads are seen within the Master plan area of Bokajan. The Road generally divided into 3(three) types -Primary road [roads linked with National Highways and are maintained by Central Public Works Department(CPWD)] with a length of 19379.81 metres, Secondary (Feeder Road) with a length of 17852.38m, and Tertiary [Rural Roads consisting of District Roads(ODR) and Village roads] with a length of 9029.914. The Town is served by one National Highway (NH-39) which is of 5668.99 metres.

Table 4 : Primary Roads:-

Sl. No.	Name of Road	Length (In metres)
1	Rongkangthir Road	518.13
2	Baburam Bey Road	269.594
3	Bormanthi Road	2250.65
4	Dillai Road	2623.25
5	Amrajan Road	1302.08
6	Lakhijan Road	2010.67
7	Rukasen Gaon Road	1043.59
8	Bokajan Station Road	2658.54
9	Ekrani Basti Road	2100.48
10	Manipuri Basti Road	1823.48
11	NEC Road	2779.35
Total length		19379.81

**Table 5 : Secondary Roads:**

Sl. No	Name of Road	Length (In Metres)
1	Nepali Basti Road	592.802
2	Manipuri Basti Road	1111.63
3	Matipul PWD Road	2078.64
4	Chandrapur Road	1674.3
5	Dumukhia Road	1014.2
6	Rukasen Road	1920.46
7	Sotricho Road	164.919
8	Bormanthi Road	1941.96
9	Old NB Road	2633.61
10	Kawaram Taro Road	1029.46
11	No. 2 Rongkangthir Road	683.267
12	Rintithe Road	963.474
<b>Total</b>		<b>17852.38</b>

**Table 6 : Tertiary Road:-**

SL. NO.	NAME OF ROAD	LENGTH
1	Bokajan College Road	726.125
2	Untitled Path	561.283
3	Ghariaidubi Shiv Mandir Road	1357.13
4	Eastern College Road	255.067
5	Talbalijan Road	389.801
6	Dargah Bagan Road	963.444
7	Matipul PWD Road	1309.17
8	Ghariaidubi Road	880.035
9	Alubari Road	704.599
10	Madhapur Road	633.46
11	Madhapur Road	816.273
12	Local Road	433.567
<b>TOTAL</b>		<b>9029.914</b>

**5.4 Transportation amenities**

At present, there is no bus terminal within the Bokajan Master Plan Area. The existing bus terminal of the private buses located at Sukhanjan should be removed to the proposed site with required facilities at Kuhiyar Bari in between the N.H.-39. Roadside parking is seen all around. This reduces the capacity of the roads and creates congestion within the town. There is lack of street signage and should be incorporated in the proposed master plan for better

navigation. The traffic junctions, rotary are neither adequate nor functioning well, because of which traffic congestion happens and needs a proper planning. No designated parking is available within the area. The on-street parking making the roads narrower. Only parallel parking to be permitted for on-street parking on the carriage way with parking spaces clearly defined by lane markings. Parking on public space anywhere in the city at any time, by any mode, needs to be charged a price. The objectives of pricing are to (i) generate revenues, (ii) provide employment, especially poor, (iii) restrain demand, (iv) promote PMT, (v) encourage private sector investment, and (vi) rationalize parking duration.

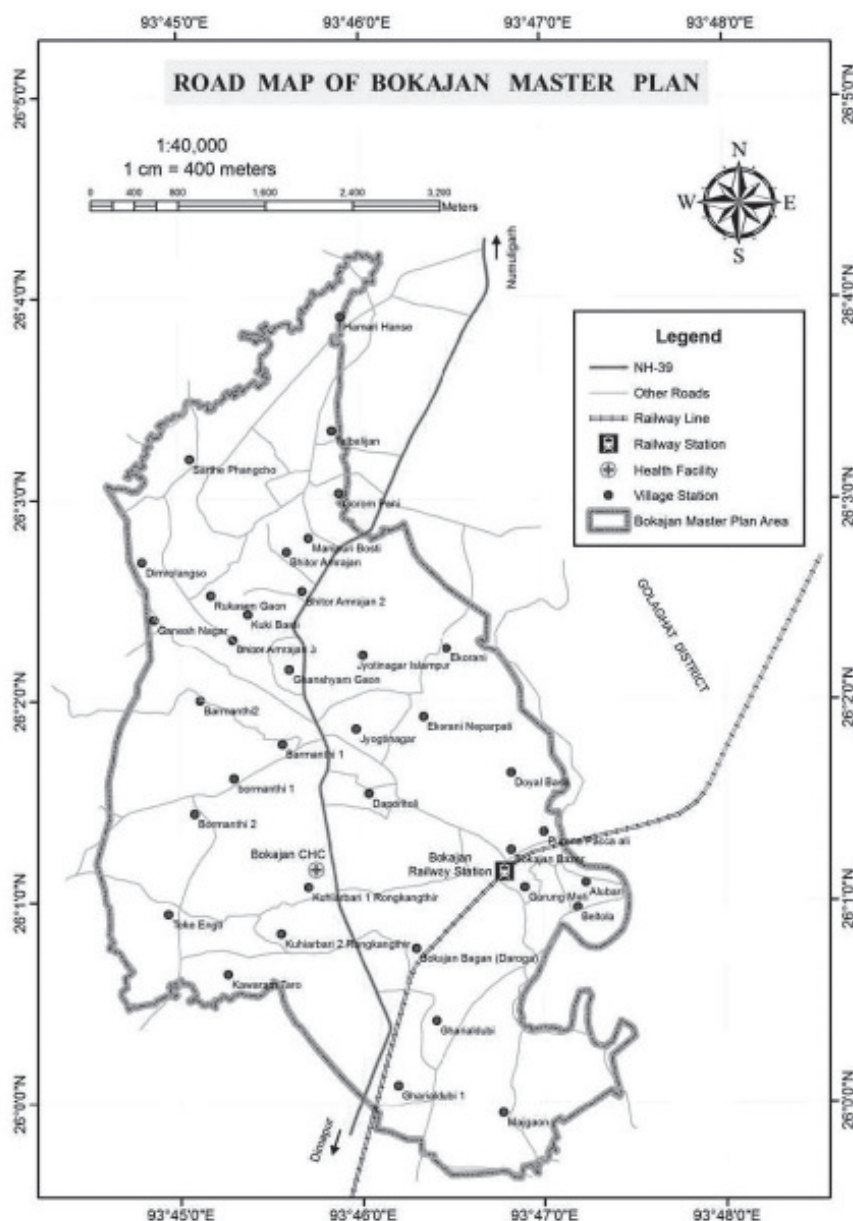
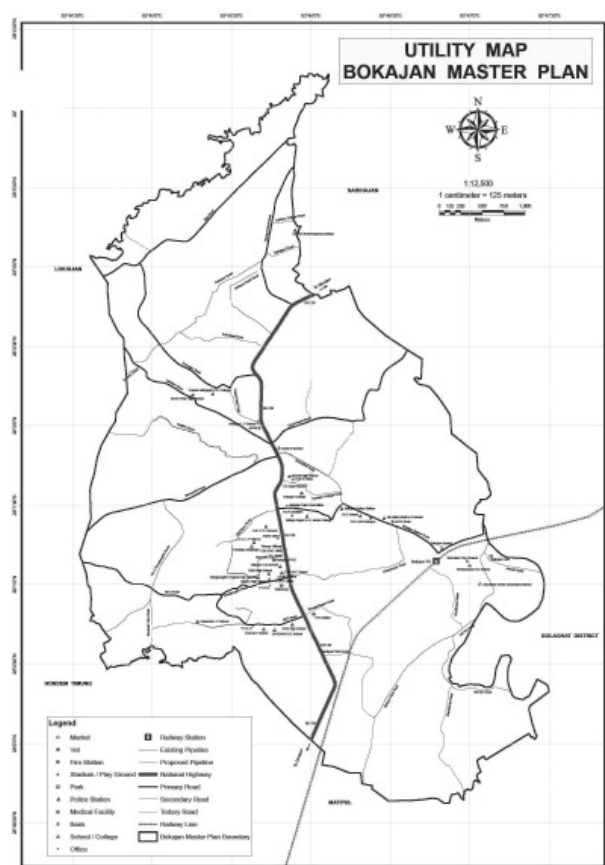


Figure15 : Road map of Bokajan Master Plan area



## **CHAPTER 6 :      INFRASTRUCTURE, PUBLIC UTILITIES AND SERVICE**

Bokajan Master plan area is served with the basic physical and social infrastructure like Police station, Cremation and burial ground, fire station, post office, railway station, PHC, college, electric substation, local markets, playgrounds, financial institutions etc. The survey shows that all the basic amenities are within 1km radius of the railway station. Bokajan CCI is the prime pulling factor of the area. Hence an Industrial Training Centre of 0.3-0.6 ha area (as per UDPFI guidelines) is required for the Master plan area. No community centre is found in the area. Bokajan Karbi club is seen which is used as a community centre, although it is in dilapidated condition. There is a requirement of community welfare centre of 0.1-0.15 ha serving a distance of 5-7km (as per UDPFI guidelines). Out of the existing cremation ground three new cremation ground has been proposed in the Master Plan area. These sites are to be properly developed with the plantation all around the cremation ground so that there is not be any adverse effect on the surrounding area. The existing cremation ground requires to be developed.



**Figure16 : Utility Map of Bokajan Master Plan**

## 6.1 WATER SUPPLY

As per T&CP field survey 2010, Bokajan Master Plan area includes 3975 houses. Out of total housing facilities within the Master Plan area, 71% of houses have access to drinking water facility and 29% houses lack the same. The Bokajan Cement Corporation of India have their own arrangement for water supply. The water demand for the projected population is based on @ 135 lpcd for small and medium towns in India. Hence Maximum daily demand considering seasonal change, daily variation, fluctuation etc., to suffice the need of drinking water facility till 2031, water storage of 8.52 MLD distributed in 8153 number of treated drinking water facility is required for a sustainable health of the area. In Bokajan town there is existing water pipeline facility of 931.747 metres which is not sufficient for the entire inhabitants of Bokajan town. As from the data collected during survey it is seen that 29% houses lack pipe water supply facility. There fore an additional 8150 metres of water pipeline is necessary (proposed) to meet the needs of the entire population of the town.

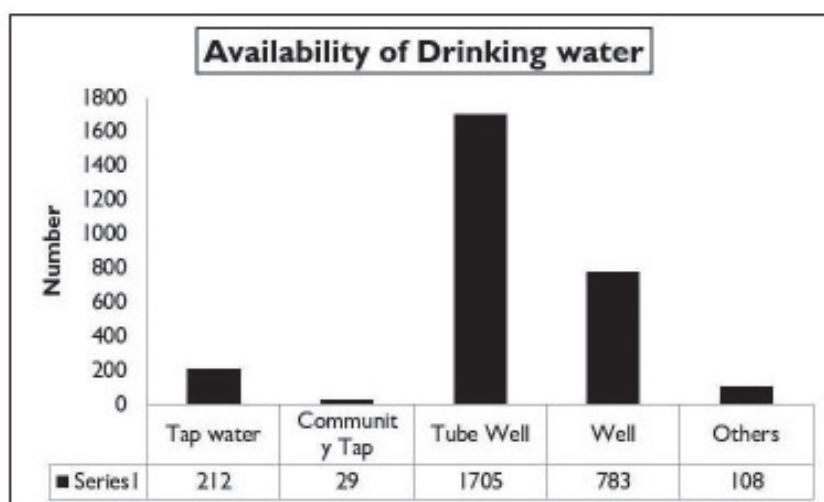
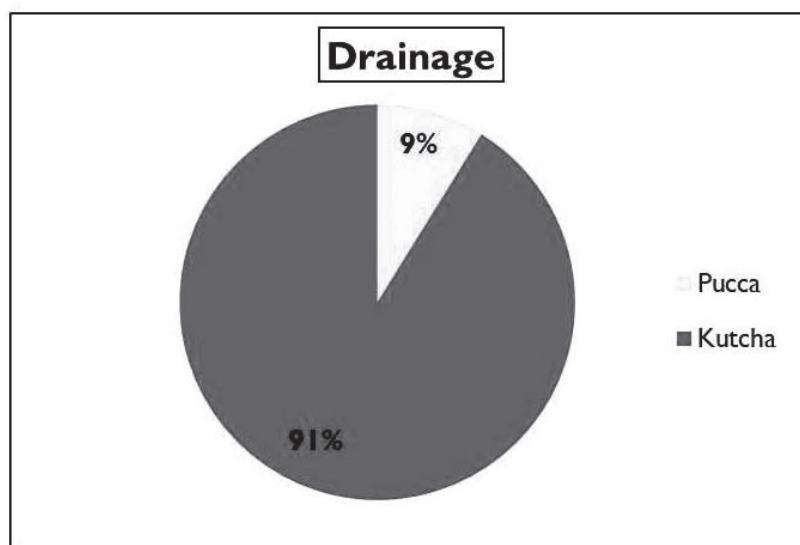


Figure17: Type of drinking water facility in master plan area

## 6.2 DRAINAGE

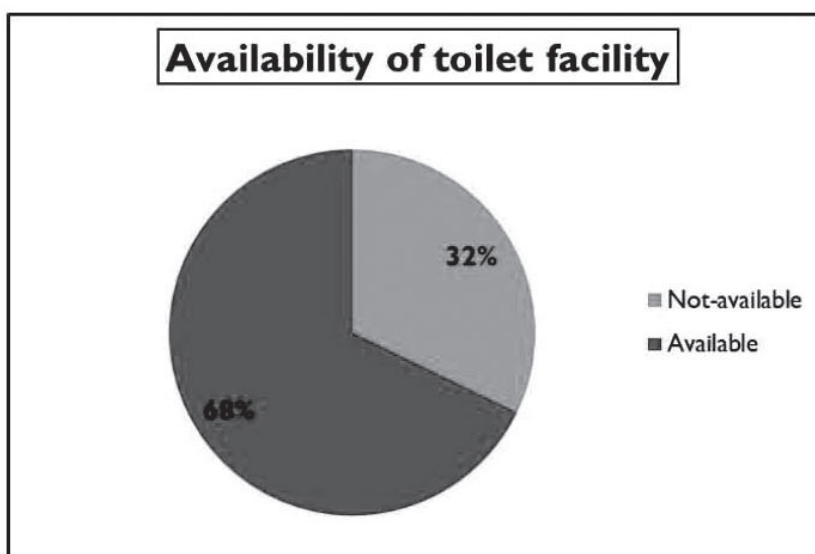
Drainage condition is divided into three categories, viz, closed drainage (pucca), open drainage (pucca) and open drainage (kutchha). As per T&CP field survey 2010, 91% of the drainage in Bokajan Master Plan area is kutchha drain and only 9% is pucca. In few places along the primary and secondary roads, the drains are covered and used a footpath. In most areas open drainage (kuccha) is seen, especially in the residential areas no drainage is the same. The Drainage and sewerage problem of Bokajan is essential to protect storm water during the rainy season.



**Figure18 : Drainage in Bokajan Master Plan area**

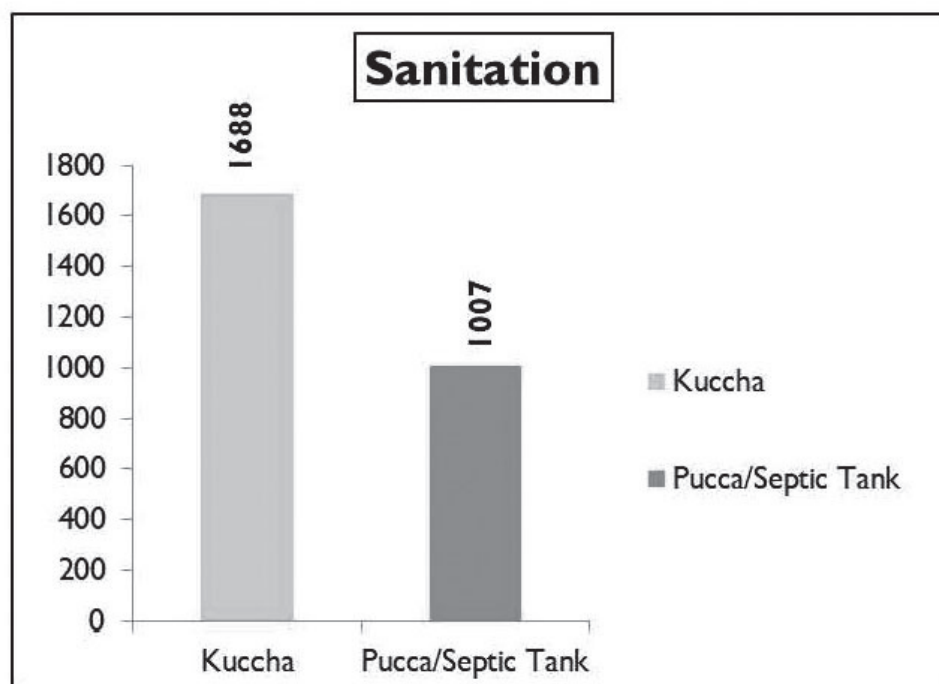
### 6.3 SANITATION

As per T&CP field survey 2010, there is no public/community sanitary facility. Bokajan Master Plan area includes 3975 houses. Out of total housing facilities within the Master Plan area, 2695 number of houses have toilet facility and 1280 houses lack toilet facility. Out of available toilet facilities, 63% are kuccha toilet and 37% pucca toilets with septic tank are found. This scenario of unavailability of toilet facilities will have negative impact on the health and hygiene of the community. To suffice the need of toilet facility till 2031, 8295 number of pucca toilet with septic tank is required for a well-balanced and sustainable health of the area.



**Figure19 : Availability of toilet facility within master plan area**





**Figure 20 : Sanitation of Bokajan Master Plan area**

#### **6.4 ELECTRICITY**

The present power supply in the area is not sufficient with the increasing activity in the Bokajan Town area. The power supply received from Namrup Power Project. Further it is also proposed that the village of the Bokajan Master Plan Area viz. Kuhiarbari, Ekarani, Amarajan etc. is needed to be electrified immediately. There is 1(One) electrical substation found within the master plan area.

#### **6.5 SOCIAL INFRASTRUCTURE**

The social infrastructure which includes Schools, Colleges, Universities and Health Centres these facilities are available in Bokajan Master Plan Area. There are 18 (Eighteen) Nos. of L.P and M.E Schools, 1 Nos. Higher Secondary School and 1 Nos.Colleges Viz. Bokajan College.

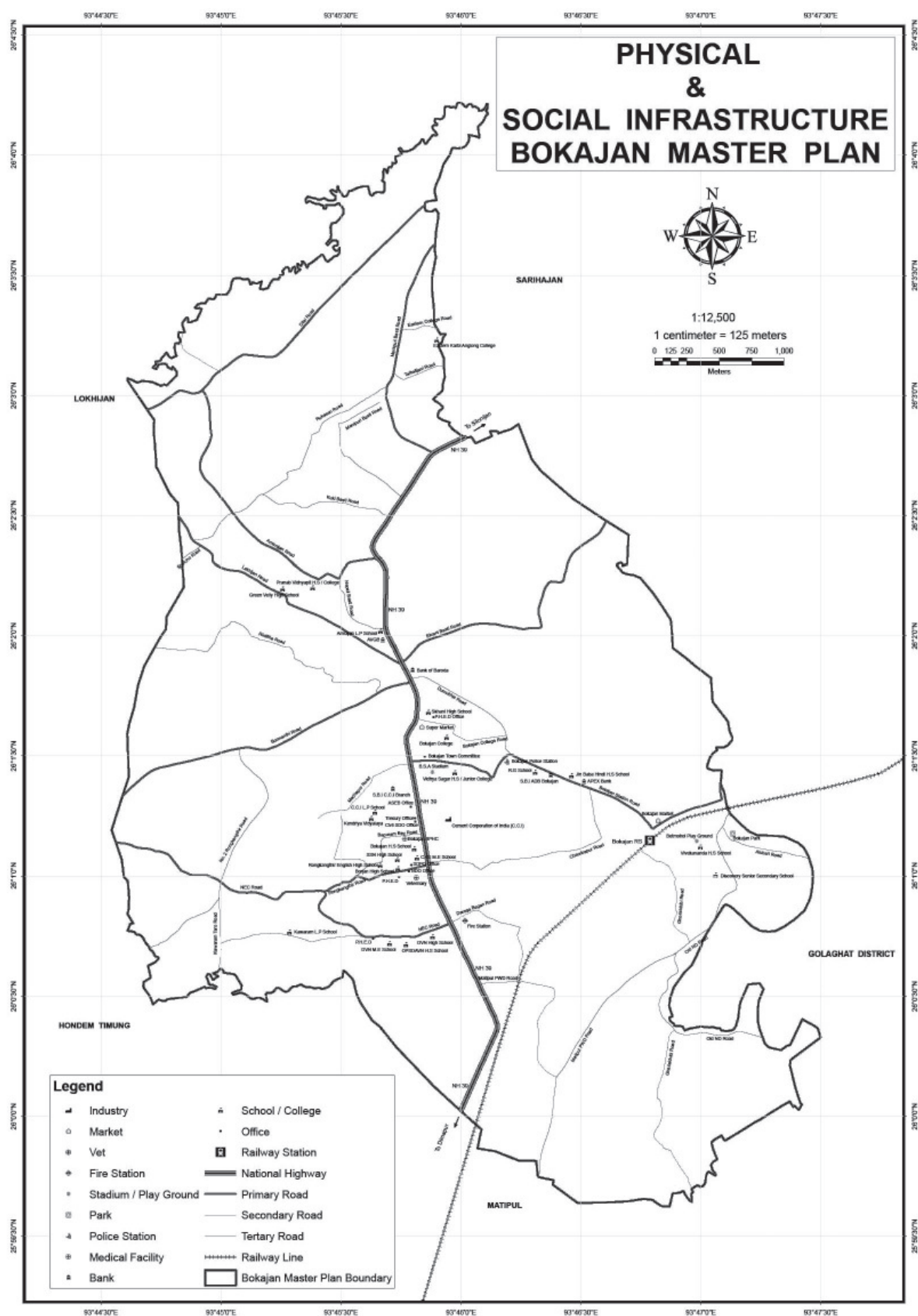


Figure 21 : Basic amenities of Master Plan area

The World Health Organisation (WHO) defines health as a state of complete physical, mental and social well being. The objective is to attain the same for the total Bokajan Master Plan area population. The existing health centre of Bokajan is not sufficient for the area. A 30 bedded Government PHC is available in Bokajan, along with few private health clinics and CCI health centre is available. The present availability of hospital beds is 1.18 beds per 1,000 population, which is quite low than the Norms and Standards for provision of Health Infrastructure of 5 beds per 1,000 population. For better medical facilities the people have to travel to Diphu, Dimapur or nearby districts. As per the population projection done till 2031, there is a need of 25-30 bedded Health care facility (Nursing home, child welfare and maternity centre) of area 0.2-0.3 ha and a Hospital (200 to 250 beds) of 0.84-1.2 ha area (as per UDPFI guidelines). Bokajan Master Plan area would require an additional 176 beds in addition to the present 30beds till 2031.



## CHAPTER 7 : ENVIRONMENT AND CITY BEAUTIFICATION PLAN

### 7.1. TOURISM

Bokajan Master Plan area is a growth centre of the hilly district of Karbi Anglong. The beauty of nature with wilderness of dense trees can be viewed from around 40 km away of the neighbouring state of Nagaland making it a tourist attraction. It is 15km away from Dimapur and partially borders Nagaland. Bokajan is well connected with 2 National Highways, viz., NH-36 on the north and NH-39 on the east. The setting up of Bokajan Cement Factory also adds to the tourism setting of the place. Moreover, tourist destination spots like Deopani Mandir, Kachari Ruins etc. within 25km distance also adds to the attraction of Bokajan. The Garampani wildlife sanctuary which is approximately 65km from Bokajan is also a place of tourist attraction. The region has a potential to be developed as eco-tourism. A tourism circuit can be developed linking the major tourist attractions in the area and its surroundings. The tourism department in coordination with the private sector could develop these circuits towards making tourism an important economic sector. Along with this, all infrastructures connected with tourism such as good roads, hotels and safari resorts, and information support services needs to be developed.

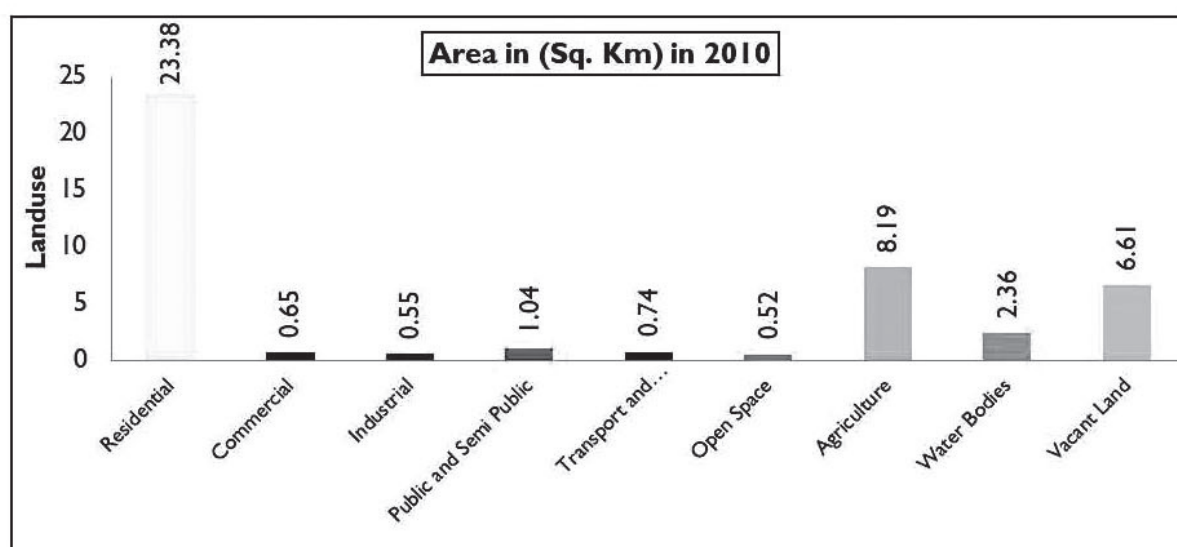
Development of Eco-tourism will help in conserving the forest lands and educating people about the importance of ecosystem. It will also increase the tourist footfall and promote socio-economic activities.

## **CHAPTER 8 : LANDUSE**

Land use survey is to ascertain the existing land use pattern as well as to estimate the present and future need of the planning area. The planning concept and proposals that has been work out in the Final Master Plan for Bokajan are based on various physical, land and Socio-Economic survey conducted by the Town & Country Planning Department in 2010. The preparation of the Master Plan is done based on estimation made for multifarious requirements upto 2031. The land use determines the inter relationship of functional activities. Various proposals have been proposed on the basis of the population projection .As per Bokajan Master Plan Data 2012 – 2013, total Master Plan Area is 44.04 sq.km out of which Bokajan Town Committee Area covers about 5.06 sq.km and developed area within the Town Committee area is only 3.94 sq.km.

### **8.1 Existing landuse**

Based on T&CP survey in 2010, the existing landuse analysis shows that the primary landuse of the master plan area are 53% residential, 19% agriculture and 15% vacant land, whereas the least is as 2% commercial, 1% industrial, 1% open space, 2% transport and communication and 2% public and semi-public. 5% of the total area is covered by waterbody. Therefore, to accommodate the physical and social infrastructure of the area the landuse distribution of the proposed master plan needs to be carefully handled.



**Figure 22 : Existing Land Use Analysis of Bokajan Master Plan Area in 2010**

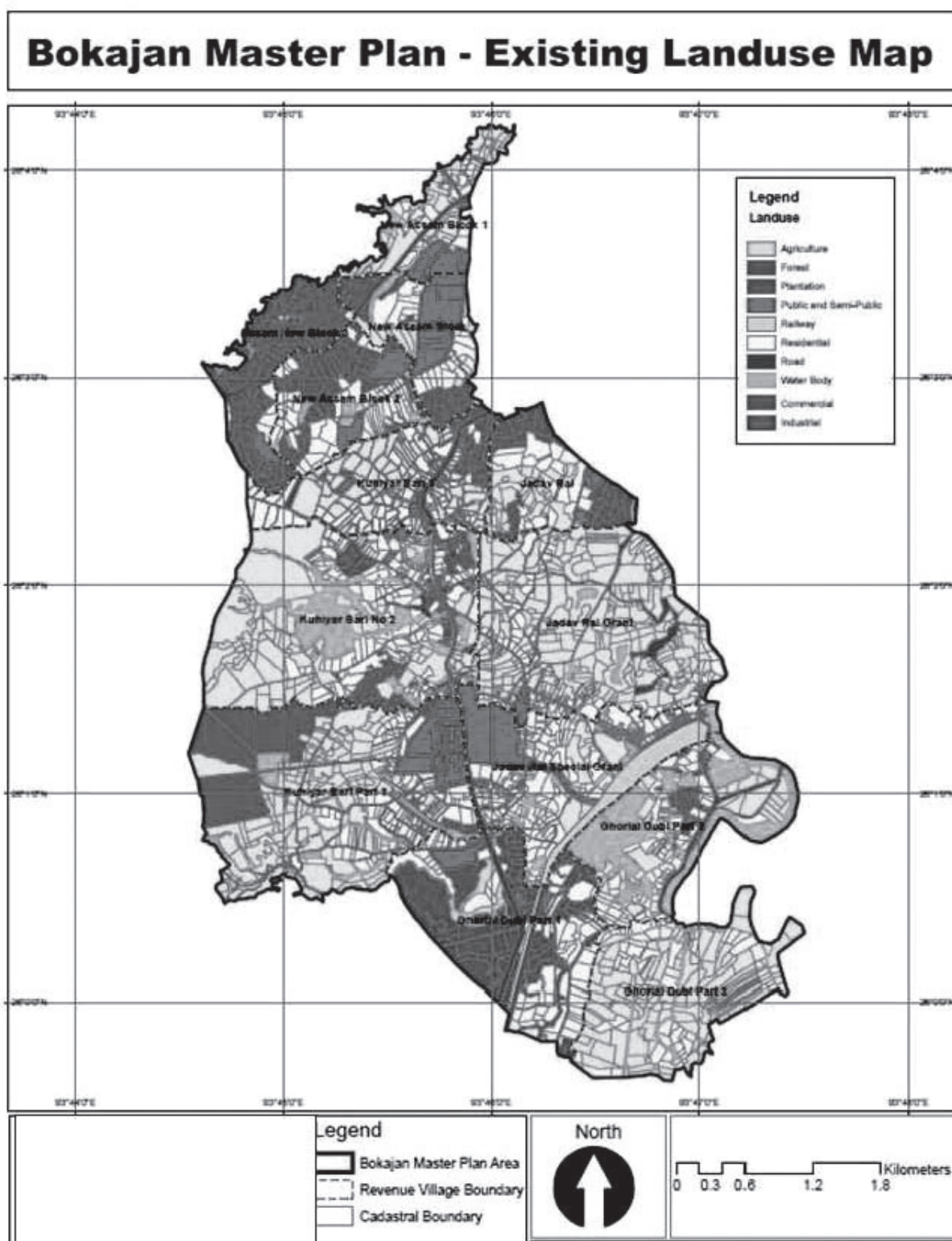
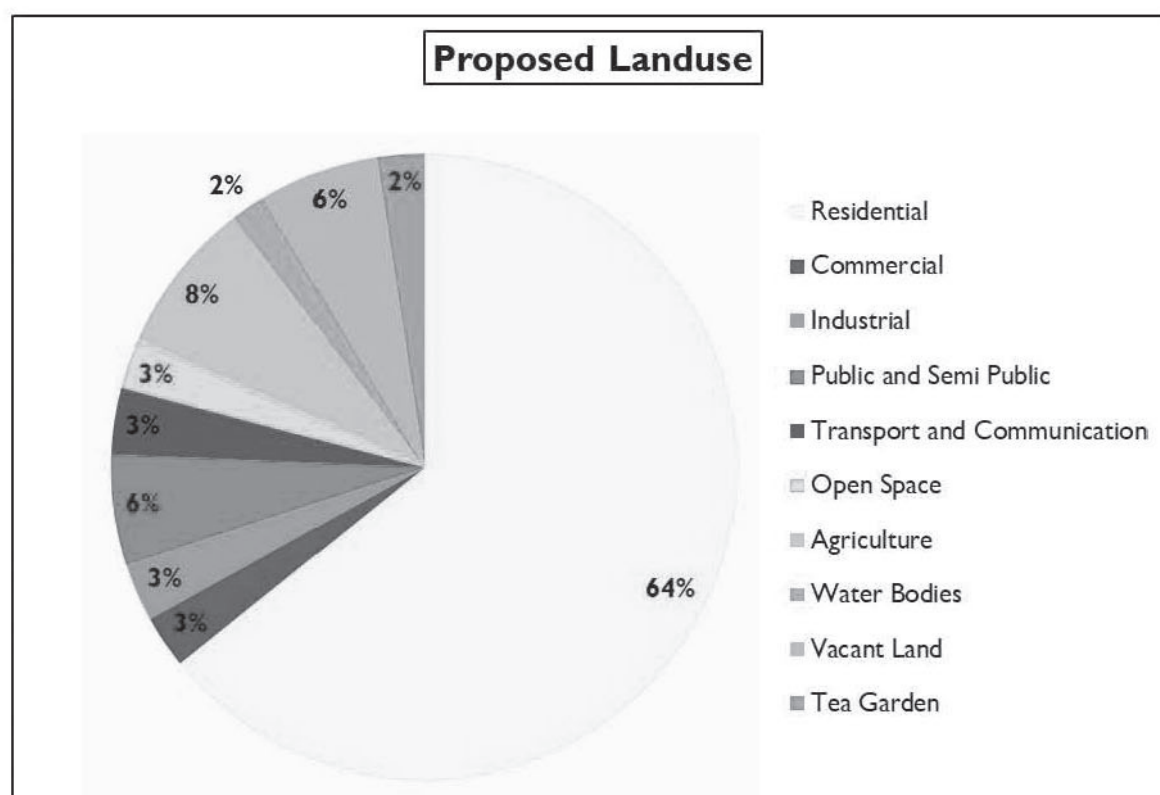


Figure 23 : Existing landuse of Bokajan Master Plan area



## 8.2 Proposed landuse

In the proposed master plan, the residential area is increased by 11%, vacant land is decreased by 9%, 11% of agricultural landuse is converted to other landuse, Open space, Tea garden, Industrial and Commercial are increased by 2%, Transport and communication is increased by 1%, Public and Semi- public is increased by 4%. As per UDPFI guidelines, it is suggested to provide 1.0 to 1.2 ha per 1000 persons for town level open spaces (excluding the open spaces in residential pockets), which can be distributed for different residential pockets uniformly for a population of 8000 to 10,000. (Calculation based on the 10-12 mts / person for the entire planned areas). The open spaces are to be developed with other socio cultural and commercial facilities so that they can serve multiple purposes. Hence based on these guidelines the following projects is proposed to develop socio cultural and commercial facilities viz- Bus Terminus, shopping complex Auditorium hall, Eco-friendly park, daily and weekly market, Truck Terminal, Harijan Colony and Housing for EWS.



**Figure 24 : Proposed landuse % of Bokajan Master Plan area**

## Bokajan Master Plan - Proposed Landuse Map

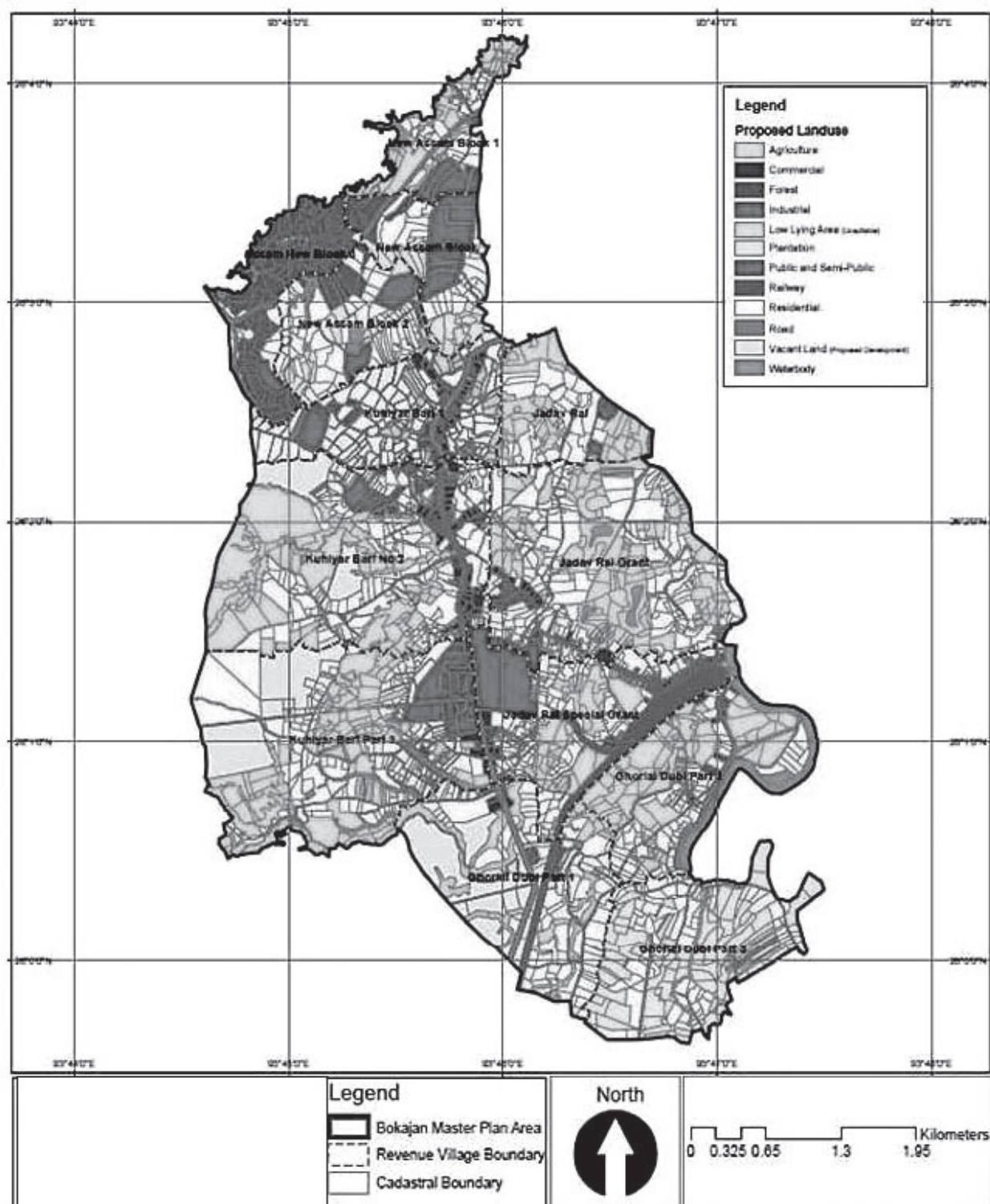


Figure 25 : Proposed Master Plan of Bokajan

### 8.3 : LAND USE PLAN

Existing landuse and proposed landuse of Bokajan Master Plan area shows that there is increase in Residential (4.9sq.km), Commercial (0.55 sq.km), Industrial (0.78sq.km), Public and semi-public (1.47sq.km), Transport and Communication (0.78sq.km), Open space (0.68sq.km), Tea Garden (1.08 sq.km) whereas there is decrease in Agriculture (4.69 sq.km), Water bodies (1.56 sq.km) and Vacant land(3.91sq.km). The percentage of the landuse change is shown in Figure 27.

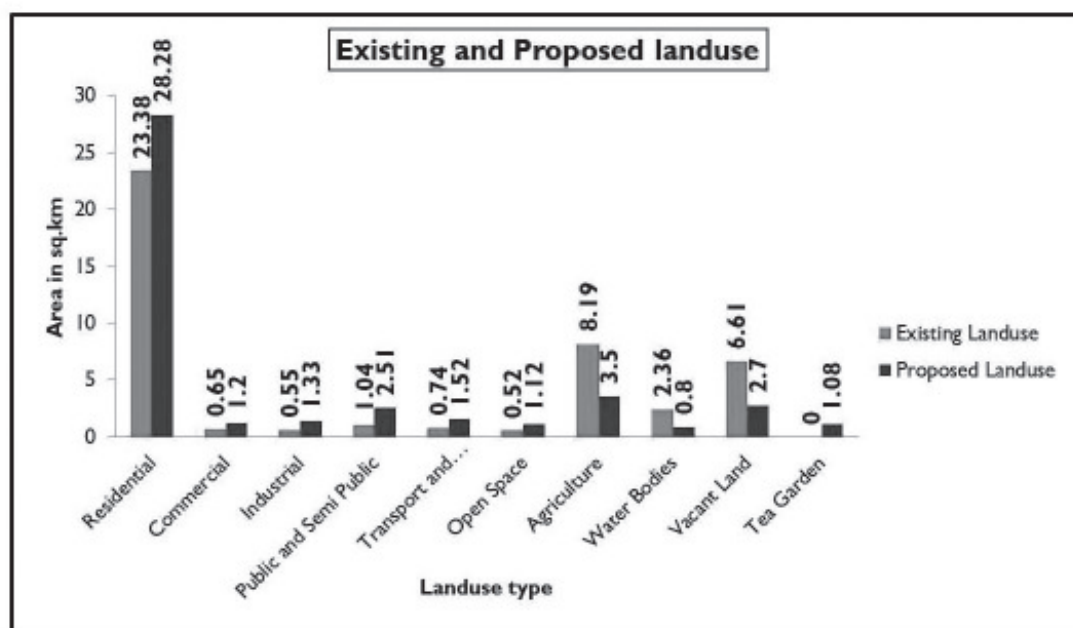


Figure 26: Existing and proposed landuse of Bokajan Master Plan area

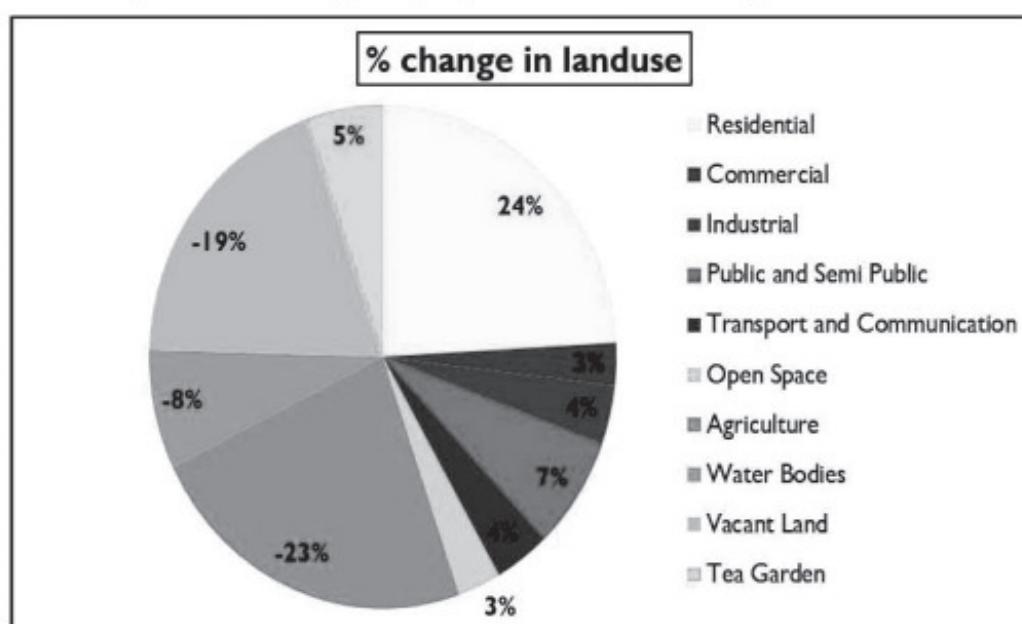


Figure 27 : Percentage change in landuse between existing and proposed Master Plan area



### 8.3.1 Issues and potential

#### 8.3.1.1 Residential

The density of the Master Plan area is 575 persons per sq.km, which is 625% more than the district average of 92 persons per sq.km as per 2011 census. It can be inferred that the area is highly congested and there is need of housing. As a solution to this issue, an additional 24% of residential area is proposed in the master plan there.

#### 8.3.1.2 Commercial

Commercial area covers approximately 2% of the existing Bokajan Master Plan area. There are mainly two commercial centres in the town namely Old market and New market. Another market Complex is now under construction adjacent to New Market area. The Old Market is very congested and need to immediate improvement. Moreover, as per T&CP field survey 2010, only 30% of the population is working which indicates that there is lack of opportunities in the area. The master plan proposal highly demands infrastructure to boost the employment generation of the region. Hence an additional 3% commercial area with proper infrastructure is proposed for the master plan.

#### 8.3.1.3 Industrial

Industrial area covers approximately only 1% of the existing Bokajan Master Plan area. There is no large industries in the Master Plan area except the Bokajan Cement Corporation of India (CCI) factory. The factory occupies an area that consist of the factory, the mining area and the township. The township consists of various civic amenities such as health centers, guest houses, bank, post office, telephone exchange etc. Few small industries are scattered in different part of the town. These are six rice mills, three lubricants industry. As per survey conducted, there are 45 small industrial unit functioning in the town. This indicates that there is lack of employment opportunities and social infrastructure in the area. An additional 4% industrial area is proposed to boost the economy of the Master plan area.

#### 8.3.1.4 Public and Semi-Public

The Public and Semi-Public landuse includes educational institution, Government offices, Hospital, Temples and Mosques, Museum, Gallery etc. It occupied about 1.04sq.km of Bokajan Master Plan area covering 2% of the whole area. There are 26 Nos. of educational institutions and 21 Nos. of Govt. offices. within the Bokajan Master Plan Area. An additional

7% Public and Semi-Public landuse area is proposed to boost the social infrastructure of the Master plan area.

#### **8.3.1.5 Transport and Communication**

Out of total Master Plan Area, 0.74sq.km is occupied for Transport and Communication facilities covering 2% of the whole area. The primary and major roads connect the regional and important places and with neighboring Dimapur town and is 10-15 km away from the town. The NH-39 runs through the town. All the major towns of Assam regularly bus services operate from the Bokajan town. The North Frontier Railway line connects Bokajan Town. All necessity commodities are brought to the area by the Railways. The present Railway Station of the town is not in a well maintained condition. To suffice the need of the area an additional 4% Transport and Communication landuse is proposed to boost the physical infrastructure of the Master plan area.

#### **8.3.1.6 Agriculture**

Agriculture is the major source of income for the people of the Master Plan area. It covers 19% of the existing landuse. As per T&CP field survey 2010, in the proposed Master Plan area 4.69% of it has been converted to other landuse as per the need of the population projected and the infrastructure of the area. The main crops is Paddy and apart from this Maize, Cauliflower, Chilli, Tomatoes, and Lettuce are also cultivated. These crops are mainly grown at Bokajan according to the climatic condition and season. People use the labour-intensive technique in farming, as there is no technological advancement. The main reason for people to practice agriculture is the Dhansiri River, which is the main source of harvesting the crops.



**CHAPTER 9 : PROPOSED PROJECTS “BRIEF AND TENTATIVE FUNDING SOURCE.****9.1. PRIORITY SECTOR AND PROJECTS :**

For the Master Plan area of Bokajan Town 12(Twelve) main projects can be identified which are:-

1) Bus Terminus at Betmahal near Dhansiri Rive in ward No. ....	4
2) Shopping Complex at Super market Complex Sukhanjan in Ward No...	6
3) Auditorium Hall at Super Market Complex at Sukhanjan Ward No. ....	6
4) Eco- Friendly Park at Betmahal near Dhansiri River in Ward No. ....	4
5) Daily & Weekly Market at Betmahal near Dhansiri River in Ward No...	4
6) Truck Terminal at Betmahal near Dhansiri River in Ward No.....	4
7) Harijan Colony at Super Market Ward No.6 Complex In Ward No.....	6
8) Housing for EWS at Bethmahal in Ward No.....	4
9) Drainage and Sewerage. ....	
10) Environment Conservation .....	
11) Govt. Collage in Ward No. ....	
12) Industrial Training Centre at Betmahal in Ward No. ....	4

These six projects could up lift the development and growth of Bokajan Town. Creating a smooth and hassle free socio-economic life for the residents of Bokajan Town along with infrastructure development.

**9.2 Fund Requirement:**

The tentative source of funding for the above mentioned projects are:- AMRUT, Infrastructure Development Fund, Entry Tax, SOPD, Grant-in-aids both Central & State Govt. and State Finance Commission.

1) Bus Terminus at Betmahal near Dhansiri River in Ward No. 4.....	Rs. 9.00 Crore
2) Shopping Complex at Super market Complex Sukhanja in W/No.6....	Rs. 15.00 Crore
3) Auditorium Hall at Super Market Complex at Sukhanjan in W/No. 6..	Rs. 8.00 Crore
4) Eco- Friendly Park at Betmahal near Dhansiri River in W/No. 4.....	Rs. 5.00 Crore
5) Daily & Weekly Market at Betmahal near Dhansiri River in W/No. 4..	Rs. 5.00 Crore
6) Truck Terminal at Betmahal near Dhansiri River in W/No. 4.....	Rs. 10.00 Crore
7) Harijan Colony at Super Market Complex in W/No. 6.....	Rs. 5.00 Crore
8) Housing for EWS at Bethmahal in W/No. 4 .....	Rs. 10.00 Crore
9) Drainage and Sewerage .....	Rs. 16.00 Crore
10) Environment Conservation .....	Rs. 5.00 Crore
11) Govt. Collage .....	Rs. 8.00 Crore
12) Industrial Training Centre at <u>Betmahal in Ward No. 4 .....</u>	<u>Rs. 4.00 Crore</u>
<b>Total</b>	<b>Rs. 100.00 Crore</b>



## **CHAPTER 10 : DISASTER MANAGEMENT PLAN**

Bokajan Master Plan area is served with 1 fire and emergency service station at present. The whole district is vulnerable to draught and as no such natural water reservoir is there in the district from where the water can be irrigated. Few villages of the Bokajan master plan area are vulnerable to flood because of the Dhansiri River and man made flood. The region is very much vulnerable to earthquake due to its weak geography and fragile geomorphology being in the most dangerous Seismic Zone i.e. Zone (V). The whole region is sitting on the bed of limestone and hence very fragile. As per UDPFI guidelines there is requirement of a Disaster Management Centre of 1ha area to serve the people of the Master Plan area.

### **10.1 Pre-Disaster Preparedness**

The Fire Services department being the nodal agency for disaster management, should identify vulnerable areas e.g. areas with high density and poor accessibility in the city and propose suitable measures. The department should make people aware about after effects of disaster particularly school children through mock drills in school, media campaigns and advertisements about emergency procedures and location of emergency shelters etc. Mock drills need to be done also in government and public offices from time to time.

### **10.2 Post disaster Preparedness**

It has been observed that any disaster is generally followed by break down of communication lines and disruption of essential services. Also the district is vulnerable to various terrorist groups. Bokajan being the bordering area of Assam and Nagaland is also vulnerable to clashes between borders. Therefore, the key communication centres should be safely located to be free from natural disasters e.g. flood, fire, earthquake or any other emergency situation

#### **10.2.3 PLAN IMPLEMENTATION**

The Master Plan implementation requires (i) development of new areas (ii) redevelopment of existing developed areas and (iii) conservation of eco sensitive areas. 'Office of the Deputy Director, Town and Country Planning, Karbi Anglong, Diphu, Assam' shall be the nodal agency for the Bokajan Master Plan implementation. Landuse plan, land use zoning, sub-division and development control regulations including local building byelaws would in general be the base for all development, and redevelopment in the Master Plan area.

**ZONING PLAN AND REGULATION :**

For the purpose of Plan development of Bokajan Master Plan area Zoning Plan and proposal have been made. The Zoning regulation of Bokajan Master plan contains the following classification of land uses.

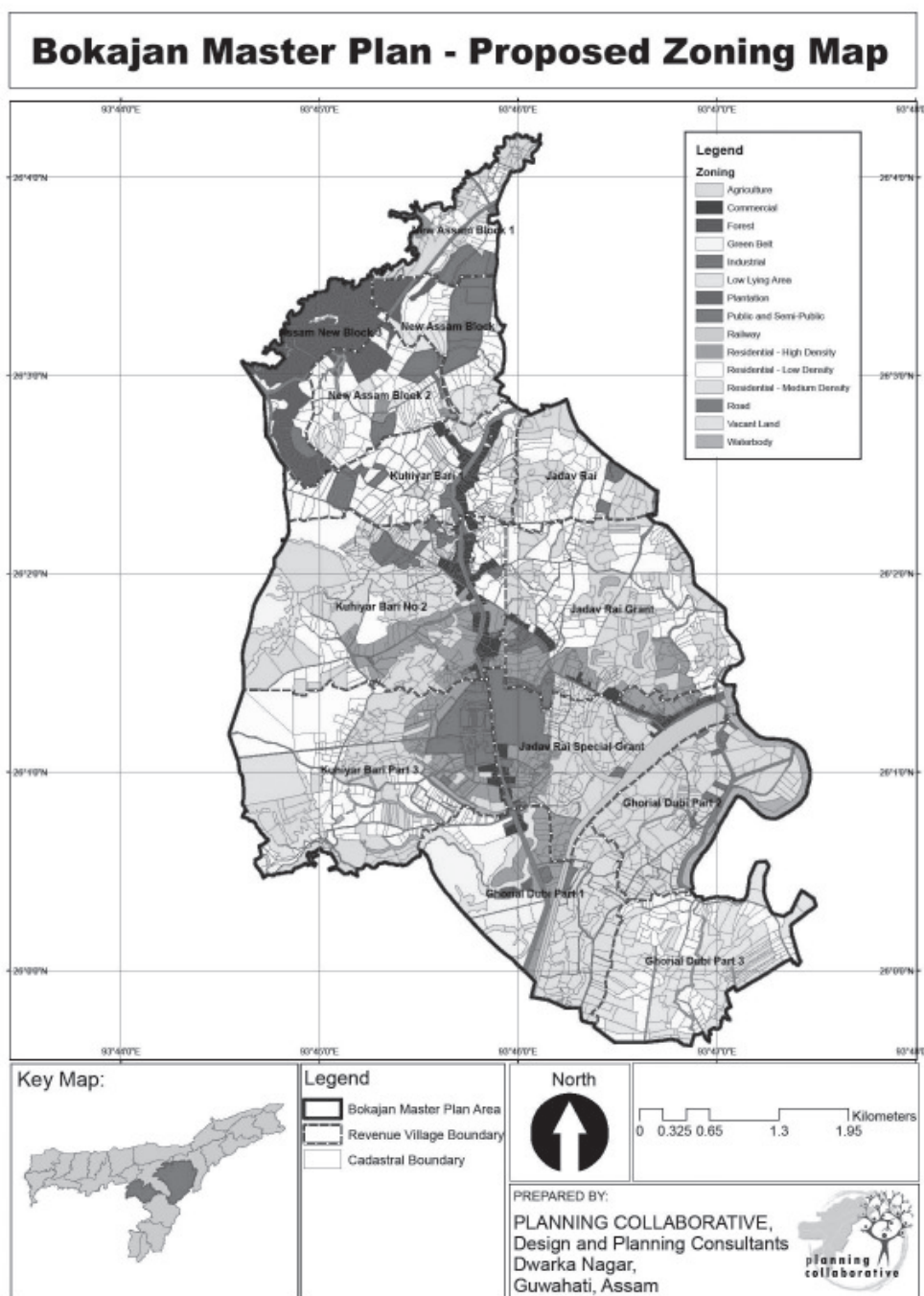


Figure No. 28 : Proposed Zoning of Bokajan Master Plan area

**Table No 7 : Classification of Zones**

Sl. No.	Zones	Arrear Covered in Sq. km	Percentage
1	Residential	28.28	64%
2	Commercial	1.20	3%
3	Industrial	1.33	3%
4	Public and Semi Public	2.51	6%
5	Transport and Communication	1.52	3%
6	Open Space	1.12	3%
7	Agriculture	3.50	8%
8	Water bodies	0.80	2%
9	Vacant Land	2.70	6%
10	Plantation(Tea Garden)	1.08	2%
<b>Total</b>		<b>44.04</b>	<b>100 %</b>

**ZONING REGULATION :****CHAPTER 11 : ZONING REGULATION****11.1 SCOPE :**

11.1.1. The Schedule lays down regulations for the use of land and buildings built thereon consistence with maintaining minimum standards of density of buildings, protection of open spaces, sanitation and environmental hygiene.

11.1.2. The Zoning Regulations should be read in conjunction with the zones proposed in the Master Plan.

**11.2 DEFINITION :**

For the purpose of these regulations, the following definition shall apply.

11.2.1. Words used in the present tense shall include the future; the singular number also includes the plural and the plural also the singular.

11.2.2. “ Agriculture” includes horticulture , farming , growing of crops , fruits vegetable , flowers grass , fodder , tress of any kind of cultivation of soil , breeding and keeping of livestock including cattle , horse ,donkeys mules , pigs , fish , poultry and beast the use of land which is ancillary to the farming of land or any other agriculture purpose ,but shall not include the use of any land attached to the building for the propose of a garden to be used along with such buildings and “ Agriculture “ shall be construed accordingly .



- 11.2.3. "Authority" shall mean the local , regional or any other "Authority" appointed by the State Government for the purpose of administering the Act. Unless otherwise appointed by the State Government the Authority in the case of Municipal Areas shall be taken to mean the Municipal Board for the area constituted under the Assam Municipal Act. 1956 (Assam Act XV of 1957) .
- 11.2.4. "Boarding House "means a building or part of a building in which is carried on wholly or partially the business of the supply of meals to the public or a class of the public for consumption in the premises.
- 11.2.5. "Building" ant construction for whatsoever purpose and of whatsoever materials construction and every part thereof whether used as human habitation or not and includes foundation, plinth wall, chimneys, drainage works, fixed platforms, verandah, balcony, cornice of projection, par of building or anything affixed thereto or any wall enclosing or intended to enclose any land or space .
- 11.2.6. "Building of Accessory Use "- a subordinate building, use of which is incidental to that of a principal building on the same plot such as garage, coal or woodshed, peon's quarter, etc .
- 11.2.7. "Building Height of " – the vertical distance measured , in the case of flat roofs from the average level of the centre line of the adjoining street to the highest point of the building adjacent to the street wall, and in the case of pitched roofs, upto the point where the external surface of the outer wall intersects the finished surface of the sloping roof and in the case of gables facing the road, the mid-point between the caves level and level the ridge, Architectural features serving no other function except that of decoration shall be excluded for the purpose of taking heights . If the building does not about on a street, the height shall be measured above the average level of the ground and contiguous to the building.
- 11.2.8 "Building Set Back"- the distance by which any building or structure shall be separated from the boundary lines of the plot.
- 11.2.9 "Clean Industry"- industries which do not throw out any smoke, fume, noise, offensive odour harmful industrial wastes and employing not more than 10 workers with of without power.
- 11.2.10. "Commerce"- means carrying on any trade, business of professional sale or exchange of goods of any type whatsoever, and includes the running of with a view to make profit, Hospitals, Nursing Homes, infirmaries, education institutions and also includes hostel, clubs, theatres, restaurants, boarding house not attached to any educational institution, series and "Commercial" shall be construed accordingly .
- 11.2.11. "Commercial Use"- includes the use of any land or building or part thereof for purpose of commerce as defined or for storage of goods, or as an office, whether attached to industry or otherwise.

**11.2.12. "Coverage"**- is the percentage ratio of the plinth area of the main and accessory buildings to the total area of the plot.

**11.2.13. "Customary Home occupation"**- means occupation other than that of operating an eating or drinking place offering services to the general public carried on by a member of the family residing on the premise and in accordance with which there is on display that will indicate from the exterior that the building is being utilized in whole or in part for any purpose other than that as a dwelling and in connection with which on article or service is sold or held up for sale except that produced by a member of the family residing on the premises and no mechanical equipment is used except as is customary for purely domestic or household purpose .

**11.2.14 "Development"** – means the carrying out of building, engineering, mining or other operations in on over or under the land, or making of any material change in the use of any building or of land.

Provided that the following operations or uses of land shall not be deemed for the purposes of these Regulations to mean Development of the land, that is to say \_

- (a) The carrying out of works for the maintenance , Improvement or other alteration of any building being works which affect only the interior of the building or which do not materially affect the use and the external appearance of the building;
- (b) The carrying out by a local or statutory authorities of any works required for the maintenance or improvement of road , being works carried out on land within the boundaries of the road :
- (c) The carrying out by local authority any works for the purposes of inspecting , repairing or renewing any sewers , main pipes , cables or other apparatus including the breaking open of any street or other land for that purpose:
- (d) The use of any building or other land within the cartilage of a dwelling house for any purpose incidental to the enjoyment of the dwelling house as such.

**11.2.15. "Development Schemes"**- means the scheme for the development or redevelopment or improvement of the Bokajan master plan Area or any part thereof.

**11.2.16. "Dwelling"**- a building or a portion thereof which is designed or used wholly or principally for residential purpose. This shall not include boarding or rooming house, tents, tourist camps, hostel or other structures designed or used primarily for transient residents.

**11.2.17. "Family"**- a group of individuals normally related in blood or connected by marriage living together as a single house- keeping unit and having a common kitchen. Customary domestic servants shall be considered adjunct to the term 'Family'.

**11.2.18. "Floor Area"**- shall mean useable covered area of a building at any floor level.

**11.2.19. "Floor Area Ratio (FAR)"**- means quotient obtained by dividing the total covered area (plinth area) on all floors by the area of the plot. Multiplied by 100.



FAR--- means covered area of all floors X 100

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Plot area

- 11.2.20.** “Hotel”- means a building or a part of a building used as a lodging and boarding house.
- 11.2.21.** “Industry”- includes the carrying of any manufacturing process as defined in Factories Act, 1984; and “industry” shall be constructed accordingly.
- 11.2.22.** “Industry use”- includes the use of any land or building or part thereof for industry as defined.
- 11.2.23** “Light Industry”- industries which do not throw out excessive smoke noise , offensive odour or harmful industrial wastes , employing not more than 100 workers and using power of not more than 100 H.P. such industries ,except in the case of foundries and smithies do not consume any solid fuel .
- 11.2.24** “Lodging House”- means a building or a part of building used for the reception of guests and travellers desirous of staying or sleeping therein.
- 11.2.25** Medium industry “- medium industries are whose which employ more than 100 workers and may use any kind of motive power of fuel, subject of course to toxious features. Factories which are classified as heavy industries under the Factories Act do not come under this category.
- 11.2.26** “Non-Conforming building or use”- a building structure or use of land existing at the time of commencement of these regulations and which do not conform to the regulations pertaining to the zone in which it is situated .
- 11.2.27** “Occupier” includes—
- (a) a tenant ;
  - (b) an owner in occupation of, or otherwise using his land ;
  - (c) a rent free tenant of any land ;
  - (d) a license in occupation of any land ; and
  - (e) any person who is liable to pay to the owner damage for the use and occupation of any land ;
- 11.2.28.** “Open Space” – means any land whether enclosed or not on which not more than one twentieth part is covered with building and whole of the remainder has been laid out as a public garden or used for purpose of recreation or lies waste and unoccupied
- 11.2.29** “Owner”- includes a mortgagee in possession, a person who for the time being is receiving or is entitled to receive, or has received, the rent or premium for any land whether on his own account of or on behalf or for benefit of any other person or as an agent, trustee, guardian or for any other person or for any religious or charitable institution, or who would so receive the rent or premium or he entitled to received the rent or premium if the land where let to a tenant; and includes the Head of a Government of. General Manager of a Railway, the Secretary or other Principal



officer of a Local Authority , Statutory Authority or company , in respect of properties under their respective control .

- 11.2.30** “Parking Space”- means an area enclosed or unenclosed sufficient in size to store one or more automobiles or any other conveyance together with a driver way connecting the parking space with a street , or alley and permitting ingress or egress of all such conveyances .
- 11.2.31** “Plinth”- means the portion of a structure between the surface of the surrounding ground and surface of the floor, first above the ground.
- 11.2.32** “Plinth Area”- means the built up covered area measuring at the floor level of the basement or of any story.
- 11.2.33** “Plot” – a piece of land occupied or intended for occupancy by a main building or use together with its accessory building and uses customary and incidental to it , including the open spaces required by these regulations and having frontage upon a street or upon a private way that has officially being approved by the competent authority .
- 11.2.34** “Plot Width”- the shorter distance from one side of the plot line to the other measured through that part of the plot to be occupied by the building.
- 11.2.35** “Prescribed” - means prescribed by rules and regulations under the Assam Town and Country Planning Act 1959 (as amended).
- 11.2.36** “Public and Semi-Public Place”- means any place or building which is open to the use and enjoyment of the public , whether it is actually used or enjoyed by the public or not , and whether the entry is regulated by any charge or not .
- 11.2.37** “Repairs”- means any renovation applied to any structure, which does not in any way changed the specification of the structure but saves the structure from further deterioration.
- 11.2.38** “Residence”- includes the use for human habitation of any land or building or part thereof including gardens , grounds , garages , stables and out houses , if any appertaining to such building and ‘residential’ shall be construed accordingly .
- 11.2.39** “Required Open Space”- the space between the plot lines and the minimum building set back lines.
- 11.2.40** “Roads or Street”- any highway, street, lane path way, alley, stairway, passage way, carriage-way, footway, square place or bridge, whether a thoroughfare or not over which the public have a right of passage or access or have passed and had access uninterruptedly for a specified period, whether existing or proposed in any scheme and includes all bunds, channels, ditches, storm water, drains, culverts, sidewall,

traffic island, roadside trees and hedges, retaining walls, fences, barriers and railway within the road lines .

**11.2.41**“Service Industry” industries which are not engaged in the manufacture of goods or articles, but are mainly concerned with repairs, maintenance, servicing and or other jobbing work.

**11.2.42**“Set back line” means a line usually parallel to the plot boundary and laid down in each case by the authority beyond which nothing can be constructed towards the plot boundary.

**11.2.43** “Site”- of a building includes not only the land actually covered by the building but also the open spaces around the building required under these rules.

**11.2.44**“Storey” the portion of a building included between the surface of any floor and the surface of the floor next above it or if there be no floor above it, then the space between any floor and the ceiling next above it.

When measured, the height of a habitable basement extending at least 5 feet above ground level or a habitable attic shall be counted as storey.

**11.2.45** “Street line”- means the line defining the site limits of a street.

**11.2.46**“Structure” any combination of material including building constructed or erected the use of which requires location on the ground including among other things, signs, signboards, fences and wall that are more than three feet height.

**11.2.47** “To Abut”- means to abut on a road such that any portion of the building is facing the road boundary.

**11.2.48** “To construct” means to erect, re-erect, and make material alterations.

**11.2.49** “to Erect” to construct a building for the first time or to re-construct existing building after demolishing it according to some fresh or revised plans.

**11.2.50** “Total floor area” – the area of all floors of a building including habitable attics and basements.

**11.2.51** “ To make Material alteration”- to make any modification in any existing building by ways of an addition or alteration, or any other change in the roof window, door, compound, sanitary and drainage system in any respect whatsoever, Opening of a window and providing inter communication doors shall not be considered as material alterations. Similarly modification in respect of gardening, wheel washing, painting, retailing and other decorative works shall not be deemed to be deemed to be material alterations, it further includes:-



- (a) Conversion of a building or any part thereof for human habitation as one dwelling house into more than one dwelling house and vice-versa;
- (b) Conversion of a building or a part thereof suitable for human habitation into a dwelling house or vice-versa;
- (c) Conversion of a dwelling house or a party thereof into a shop, warehouse or factory or vice-versa.
- (d) Conversion of a building used intended to be used for one purpose such as shop, warehouse or factory, etc. Into one or another purpose.

**11.2.52** "To Re-erect" – to construct for a second time or subsequent time a building or part of a building after demolishing it on the same plan as has been previously sanctioned.

**11.2.53.** "Water Course:- means a natural channel or an artificial one formed by draining or diversion of a natural channel meant for carrying storm water either from a single property or several properties draining thereof in combination .

**11.2.54.** "Warehouse"- means a building the whole or substantial part of which is used or intended to be used for the storage of goods whether for keeping or for sale or for any similar purpose but does not include a store room attached to , and use for the proper functioning of a shop .

**11.2.55.** "Yard"- means an open space at ground level between a building and the adjoining lines of the plot unoccupied and unobstructed except by encroachment or structures specifically permitted by these byelaws on the same plot with a building. All yard measurement shall be the minimum distance between the front, rear and side yard-plot boundaries, as the case may be, and the nearest point of the building including enclosed or covered porches. Every part of every yard shall be accessible from every other part of the same yard.

**11.2.56.** "yard front" – means a yard extending across the front of a plot between the side yard lines and being the minimum horizontal distance between the street line and the main building or any projection thereof other than steps , unenclosed balconies and unenclosed porches .

**11.2.57** "yard rear" – means a yard extending across the rear of a plot measured between a plot boundaries and being the minimum horizontal distance between the rear plot boundary and the rear of the building or any projection other than steps. Unenclosed balconies or unenclosed porches. In a corner plot the rear yard shall be considered as parallel to the street upon which the plot , has its least dimension . In both the corner and interior plots the rear yard shall be at the opposite end of the plot from the front yard .

**11.2.58** "Yard side" – means a yard between the building and the side line of the plot and extending from the front line to the rear of the plot and being the minimum horizontal distance between the side boundary line and the sides of a building of any other projections other than steps unenclosed balconies or unenclosed porches.



The Bokajan Master Plan area is hereby divided in to the following six zones shown on the accompanying Zoning Map which together with all explanatory matters thereon, is hereby declared to be a part of these regulations.

**11.3. CLASSIFICATION OF ZONES AND ESTABLISHMENT OF ZONING MAP.**

**11.3.1.** The zones designated under 3.1 may be further

Where non-conforming use status applied to a structure and premises in combination, removal or destruction of the structure shall eliminate the non-conforming status of the land.

- a) Low Density
- b) Medium Density
- c) High Density
2. Commercial Zones.
3. Industrial Zones –
  - (a) Light Industry
  - (b) Medium Industry
4. Public and Semi-public Zone
5. Recreational and Open Space Zone –
6. Green Belt Zone.

**11.3.2** The Zones designated under 3.1 may be further divided into sub-zones by the authority where it deems it expedient, the designation of such sub-zones being dependent on the special use to which each such sub-zones is being utilized.

**11.3.3.** Zone boundaries of each zone shall be as established in the zoning Map of the Bokajan Master plan area and a copy of which shall be located in the office of the local authority in a place easily accessible to the public which be the final authority as to the current zoning status of land and water area building and other structure in the Bokajan Master Plan area.

**11.3.4.** Interpretation of zone boundaries – where uncertainly exists as to the boundaries of zones as shown on the zoning Map, the following result shall apply:-

- (a) Boundaries indicated as approximately following the centre lines of streets, highways or alleys shall be construed to follow such centre line.
- (b) Boundaries indicated as approximately following established plot boundaries shall be construed as following such plot boundaries.
- (c) Boundaries indicated as approximately following the centre lines of streams, river canals, lakes or other bodies of water shall be construed to follow such centre lines.
- (d) Boundaries indicated as parallel to or extension of features indicated in sub-sections (a) to (c) above shall be so construed distances not specially indicated on the zoning Map shall be determined by the scale of the map.

- (e) Where physical or cultural features existing on the ground are at variance with those shown on the zoning Map, or in other circumstances not covered by sub-section (a) through (d) alone, the Director of Town & country planning shall interpret the zone boundaries.

**11.3.5.** No changes of any nature shall be made in the zoning Map except in conformity which the procedures set forth in these Regulations. Any unauthorized change of whatever kind by any person shall be considered a violation these Regulations and punishable as provided under clause 16 of these Regulations.

**11.3.6.** Regardless of the existence of purported copies of the official zoning Map which may from time to time be made or published, the official zoning Map which shall be located in the office of the local authority in a place easily accessible to the public shall be the final authority to the current zoning status of land and water areas, building and other structures in the planning area.

**11.4. Application of zoning regulation:**

**11.4.1.** The requirement of this Regulation within each zone shall be the minimum requirement and shall apply uniformly to each class or kind of structures or land except as hereinafter.

**11.4.2.** No building, structure, or land shall hereafter be used or occupied and no building or structure or part of the building shall hereafter be erected, re- erected or materially altered unless in conformity whit al of the regulations herein specified for zone in which it is located.

**11.4.3.** No building or other structure shall hereafter be erected re-erected or materially altered.

- (a) To exceed the height.
- (b) To accommodate or house a greater number of families.
- (c) To occupy a greater percentage of plot area.
- (d) To have narrower or smaller rear yards, front yards, slide yards of other open spaces .than herein required, or in any other manner contrary to provisions of these regulations.

**11.4.4.** No part of a yard or other space, or off street parking or loading space required about or in connection with any building for the purpose of complying with this regulation shall be included as part of a yard, open space, or off street parking or loading space similarly required for any other buildings.

**11.4.5.** No yard or plot existing at the time of coming into force of these regulation shall be reduced in dimension or are below the minimum requirements set forth herein ; yard or plots created after the effective date of these regulations shall meet at least the minimum requirement established by these Regulation .



**11.4.6. Non-conforming plots, non-conforming uses of land, non-conforming structures and non-conforming use of structure and premises;**

**11.4.6.1.** Within the zones established by these regulations or amendments that may later be, adopted therein existing plots, structures and uses of land and structures which were lawful before these regulations came into force or were amended, by which would be prohibited, regulated, or restricted under the terms of these regulations or future amendments, shall be permitted to continue until they are removed. Such uses are declared by these regulations to be incompatible with permitted uses in the zones involved. Such non-conformities shall not be enlarged, upon, expanded or extended nor be used as grounds for adding other structures or uses prohibited elsewhere in the same zone.

**11.4.6.2.** A non-conforming use of a structure, a non-conforming use of land or a non – conforming use of a structure and land shall not be extended or enlarged after coming into force of these regulations by attachment on a building or premises of additional signs intended to be seen from off the premises , or by the addition of other uses of a nature which would be prohibited generally in the zone involved .

**11.4.6.3.** Nothing in these regulations shall be deemed to require a change in the plans, constructions, or designated use of any building on which actual construction was lawfully begun prior to the coming into force of these regulation and upon which actual building construction has been diligently carried on. Actual construction is hereby defined to include the placing of construction materials in permanent position and fastened in a permanent manner; except that where demolition or removal of an existing building has been substantially begun preparatory to rebuilding as demolition or removal shall be deemed to be actual construction provided that work shall be diligently carried on until completion of the building involved.

**11.4.6.4.** If two or more plots or combinations of plots and portions of plots with continuous frontage in single ownership are of the record at the time of coming into force or amendment of the regulations and if all part of the plots do not meet the requirement for plot width and area as established by these regulations , the land involved shall be considered to be an undivided parcel for the purposes of these regulations and no portion of said parcel shall be used or sold which do not meet plot width and area requirements established by these regulations , nor shall any division of the parcel be made which leaves the remaining plot with width or area below the requirements stated in these regulations.

**11.4.6.5.** Non-conforming uses of land – Where on the date of coming into force of these regulations or amendments thereto lawful use of land exists that is made no longer permissible under the terms of these regulations as enacted or amended such use may be continued, so long as it remains otherwise lawful , subject to the following provisions :-



- (a) No such non-conforming use shall be enlarged or increase, nor extended to occupy a greater area of land than was occupied on the date of coming into force of these regulations or amendments thereto.
- (b) No such non-conforming use shall be moved in whole or in part to any other portion of the plot or parcel occupied by such use on the date of coming into force of these regulations or amendments thereto.
- (c) If any such non-conforming use of land ceases for any reason for a period of more than 30 days any subsequent use of such land shall conform to the requirements specified by these regulations for the zone in which such is located.

**11.4.6.6. Non-conforming structure** – where a lawful structure exists on the date of coming into force of these regulations or amendments thereto that could not be built under the terms of these regulations by reason of restriction on area, plot coverage, height yards or other characteristics of the structure of its location on the plot such structure may be continued so long as it remains otherwise lawful, subject to the following provisions:-

- (a) No such structure may be enlarged or altered in a way which increases its non-conformity.
- (b) Should such structure be destroyed by any means to an extent of more than 50 percent of its replacement cost at the time of destruction. It shall not be reconstructed except in conformity with the provisions of these regulations,
- (c) Should such structure be moved for any reason for any distance whatever, it shall thereafter conform to the requirements for the zone in which it is located after it is moved.

**11.4.6.7. Non-conforming uses of structures-** If a lawful use of a structure, or of structures and premises in combination, exists on the date thereto of coming force of these regulations or amendments that would not be allowed in the zone under the terms of these regulations the lawful use may be continued so long as it remains otherwise lawful subject to the following provisions:-

- (a) No existing structure devoted to a use not permitted by these regulations in the zone in which it is located shall be enlarged, extended, constructed, reconstructed, moved or structurally altered except in changing the use of the structure to use permitted in the zone in which it is located;
- (b) No such non-conforming use shall be enlarged or increased or extended to occupy a greater area of the building that is occupied by such use the time of coming into force of these regulations or amendments thereto;

- (c) Any structure, or structures and land in combination, in or on which a non-conforming use is superseded by a permitted use, shall thereafter conform to the requirements of these regulations for the zones in which such structure is located, and the non-conforming use may not there-after be resumed; when a conforming use of a structure, or structures and premises in combination is discontinued or abandoned for six consecutive months or for 18 months during any three year period, the structure or structures and premises in combination, shall not thereafter be used except in conformance with the regulations of the zone in which it is located.

**11.4.6.8. Repairs and Maintenance** – One any building devoted in whole or in part to any non-conforming use, work may be done in any period of 12 consecutive months on ordinary repairs, or on repair or replacement of non-load-bearing walls, fixtures, wiring or plumbing, to an extent not exceeding 10 percent of the current replacement value of the building, provided that the cubic contents of the building as it existed at the time of coming into force of these regulations or amendments thereto shall not be increased.

Nothing in these regulations shall be deemed to prevent the strengthening to a safe condition of any building or part thereof declared to be unsafe by any official charged with protecting the public safety upon order of such official.

**11.4.6.9. Uses under Exception Provision not non-conforming uses** – Any use for which a special exception is permitted as provided in these regulations shall not be deemed a non-conforming use, but shall without further action be deemed a conforming use, in the zones in which it is permitted.

**11.4.7. “Accessory Use”** - the term Accessory use shall not include:-

- (a) Any use not on the same plot, with the use to which it is accessory, unless authorized by the authority;
- (b) Any use not customarily incident to a permitted use;
- (c) Any use detrimental to the neighbourhood by reason of emission of smoke, noise, odour, vibration, dust or fumes;
- (d) Storage of more than two commercial automobiles except on an agricultural piece of land;
- (e) A secondary dwelling on the same plot with a main dwelling, unless each building shall have at least the open space and equivalent plot size as required by Clause 4.8;
- (f) Advertising signs excepting signs not more than 10 sq.ft. or 0.9 sq.m in total area pertaining to the lease, sale or use of a plot or building on which they are



placed. On a plot occupied by a dwelling there shall not be more than two signs with a total area of 2 square feet or 0.18 sq.m. per sign for each family house;

**11.4.8. Yards and Open Spaces:--**

- (a) Each structure hereafter erected, re-erected or materially altered shall be provided with specific front, side and rear yard;
- (b) On plots occupied by building only, not exceeding 30 percent of the rear yard may be occupied by one storied building of accessory use;
- (c) Special type of Building- Subject to the requirements of set-backs from prescribed street lines and side and rear yards under the representative Rules no building used for Theatres, Cinema Halls, Concerts or Assembly Halls, Stadium, buildings intended for Religious worships, Hospital or Dispensary buildings, Markets, Exhibition Halls or Museum and other such buildings shall have an open space of not less than 25 ft. or 7.5 m. from the front boundary and 15 ft. ,or 4.5.m. from the side and rear boundaries of the plot on which such building are construction.

**11.4.9. Visibility at Intersections in Residential Zone-** On corner plot in any residential zone nothing shall be erected, placed, planted or allowed to grow in such a manner as materially impede vision between a height of two and half and ten feet above the centre line levels of the intersecting streets in the area bounded by the street lines of such corner plot and a line joining points along said lines 50 ft. or 15.0 m. from the point of the intersection.

**11.4.10. Building abutting two or more streets-** When a building abuts two or more streets the set-backs from the streets shall be such as if the building was fronting each such street.

**11.4.11. Means and Access:-**

- (a) No building shall be constructed on any plot for any-use where there is no means of access to such plot;
- (b) Notwithstanding anything prescribed in the Master Plan the widths of such access or lanes, roads etc. to one individual plot or plots whether private or public shall be prescribed by the Authority;

**11.4.12.** The authority may prescribe a line on one or both sides of any public or private road or street and no person shall construct, re-construct or materially alter any portion of any building or structure on land within such prescribed street line.



**11.4.13.1.** If any building or structure or part of a building or structure abutting on a public or private road or street is within such line of the street, the Authority may required such building or structure to be set-back beyond such prescribed line to a distance as prescribed in these regulations, whenever it is proposed:-

- (a) To re-build such building or structure or to take sown such building or structure;
- (b) To remove, re-construct or make any addition to or structure alteration in any portion of such building or structure which is within such regular prescribed street line.

**11.4.13.2.** When any building or structure or any part thereof within the prescribed line of street falls down or is burnt down or is taken down the Authority may at one take possession of the portion of land within the prescribed line of street previously occupied by the said building or structure and if necessary clear the same under the provisions of the Assam Town and Country Planning Act, 1959 (as amended)

**11.4.14.** Land Subdivision and Layouts- Except as otherwise provided, no land will be developed or sub-divided and no layouts on land shall be prepared, altered, done or executed unless in conformity with these regulations herein specified for the zones in which the land is located.

**11.4.15.** Fences, walls and hedges- Notwithstanding any other provision in these regulations, fences, walls and hedges may be permitted in any required yard, or along the edge of any yard provided that no fence, wall or hedge along the sides or front edge of any front yard shall be over 3 ft. or 0.9 m. in height:

**11.4.16.** Off-street parking space for Motor Vehicles, Scooters and Cycles-

- (a) Off-street parking space shall be provided on any plot on which the uses specified in the Table –I are hereafter established; such parking space shall be provided with adequate vehicular access to a street.
- (b) Each off-street parking space provided shall not be less than 18 Sq.m. (200 Sq.ft.), 3 Sq.m. and 1 Sq.m. of area for car scooter and cycles respectively. The area of drives, aisles and such other provisions required for adequate access shall not be counted as the part of area specified for parking.
- (c) Off-street parking space provided shall be not less than the minimum requirements specified in the Table – I for each type of use;
- (d) If a vehicle parking space required by these regulations is provided in parking areas by groups of property owners for their mutual benefit, the Authority may construe such use of this space as meeting the off-street parking requirements of these regulations.

- (e) If off-street vehicle parking space cannot be reasonably provided on the same plot on which the principal use is conducted the Authority may permit such space to be provided on their off-street property, provided such space lies within 400 feet or 12.0 m: of the main entrance to such principal use. Such vehicle parking space shall be deemed to be required open space associated with the permitted use and shall not therefore, be reduced or encroached in any manner;

### 11.5. REGULATIONS FOR DIFFERENT ZONES.

11.5.1. Regulations for different zones regarding minimum size of plots, minimum set-backs of the building or structure from the prescribed street line, maximum coverages etc. shall be as follows-

#### REGULATIONS FOR DENSITY, COVERAGE, FLOOR AREA RATIO AND SET BACK FOR DIFFERENT ZONES.

##### 11.5.1.1. Residential Use Zone-

- (i) Plot size\_

Density	Area in Sq.ft.	Area in Sq.mt.
Low	5.760	535.88
Medium	4.320	401.76
High	2.880	268.84

In case of low cost housing for low income group and slum re-housing the minimum plot size could be 1800 sq.ft.

##### 10 Plot Coverage

Density	Maximum Coverage	Maximum F.A.R.
Low	40.p.c.	75
Medium	45.p.c.	100
High	50.p.c.	125

## (ii) set-back line\_

- (a) Front set-back- minimum set-back for all types of buildings is 15 ft. unless it is specified for particular street;
- (b) Side and Rear set-back- Minimum side set-back and rear set-back for all individual plot are 5ft and 10 ft. respectively

**11.5.1.2. Government Offices\_** In order to achieve architectural composition and intensive use the following provisions are stipulated.

Maximum F.	125
Maximum Coverage	50 p.c.
Maximum Covered parking	10 p.c.
Minimum Front set-back	20 ft.
Minimum side and rear set-back	10 ft.

**11.5.1.3. Commercial Use Zone-**

Minimum individual plot size for commercial use	....	1250 sq.ft. (116.25 sq.m.)
Maximum F.A.R.	....	200
Maximum Ground floor coverage including 5 p.c. for covered garage for cars and cycle	....	70 p.c.
Coverage for second floor and above	....	50 p.c.
Minimum front set-back unless it is specified for particular street.	....	10 ft.
Side set-back	....	3 ft.
Rear set-back	....	10 ft.
Set-back for Market complex- Minimum front set-back from Major Road	....	30 ft.
Side and rear set-back	....	10 ft.
Maximum coverage including 5 p.c. coverage garages	....	50 p.c.
F.A.R.	....	300
Set-back for ware-housing, storage, etc.-		
Front	....	20 ft.
Side	....	10 ft.
Rear	....	15 ft.
Coverage	....	70 p.c.



**11.5.1.4. Industrial Zone-**

Sl.No.	Requirements	Light Industry	Medium Industry
1.	Minimum size of plot	8,000 sq.ft (744.00 sq.m.)	20,000 sq.ft. (1.860 sq.m.)
2.	Minimum set-back		
	Front	20 ft.(6 m.)	30 ft.(9 m.)
	Side	10ft.(3m.)	15 ft.(4.5m.)
	Rear	20 ft.(6 m.)	20 ft.(6 m.)
3.	Maximum Coverage	45 p.c.	55 p.c.
4.	Maximum F.A.R.	100	75

N.B. If any structure or building is permitted in the Industrial Zone for human habitation under the provision of these rules the yard condition shall be same as prescribed for high density residential zone.

**11.5.2. Regulations for different zones regarding use permitted, uses permissible on appeal to the authority and uses prohibited shall be as follows-**

**11.5.2.1. Regulations for Residential Zone-****11.5.2.1. A Use permitted-**

- (a) Dwellings;
- (b) Churches, temples, mosques and other places of worship;
- (c) Schools offering general educational courses, community halls, welfare centre, public libraries, art galleries, museums; hostels, for educational institution offering general courses gymnasiums;
- (d) Medical, eye and dental practitioner's clinics;
- (e) Professional offices and incidental to such use not occupying a floor area exceeding 200 sq.ft. for 18.0 sq.metre;
- (f) Club houses not conducted as business, public parks and private parks which are not utilized for business purposes;
- (g) Nurseries and general agriculture, horticulture;
- (h) Accessory uses customarily incidental to any principal use and meeting the requirements of clause 3:4.
- (i) Post offices, Police out-post and fire stations;
- (j) Taxi stands and bus stands, Cycle and Rickshaw stands

**11.5.2.1. B :** Use permissible on appeal to the authority-

- (a) Municipal state and Central Government uses but not offices;
- (b) Public utilities;
- (c) Dispensaries for human care except they are meant primarily for mental treatment, convalescent houses sanitaria;
- (d) Philanthropic uses, residential hostels restaurants, cafeteria milk barks, boarding or lodging house in independent buildings;
- (e) Clean industry considering the (performance characteristics) following indicators-(i) Noise (ii) Vibration (iii) Smoke (iv) Dust (v) Odour (vi) Effluent (viii) Employment (ix) Vehicular traffic (x) General nuisance. (and indicative list of industries which could be permitted in residential area subject to the condition it satisfies is given in Appendix).
- (f) Trade or other similar schools not involving any danger of fire explosion, noise, vibration, smoke; dust; odour; heat or other objectionable effluents;
- (g) Branch Offices of banks and local offices of any public authority and telegraph office;
- (h) Golf clubs and green house,
- (i) Market places with only vegetables, fruits, flowers; fish and meat and other connected day to day requirements;
- (j) Theatres, assembly or concert halls, dance and music halls and such other places of entertainment;
- (k) Electric sub-station;
- (l) Neighbourhood shopping centre with goods offered for sale for day to day requirements and the uses permissible under clauses 5 and 5.2.1.C;

**11.5.2.1.C:** A building or premises with a shop frontage along a street in residential Zones- Permission may be allowed only for the following purposes subject to the conditions that-

- (a) The additional uses permissible hereunder shall be restricted to a depth or 20 ft. or 6.0 metre and only the building in the front portion abutting the street on which the shop line is marked;
- (b) Where the building or premises abutted on two or more streets, no direct opening of such shops may be permissible on the street, on which the shopping line is marked;
- (c) When the ground floor of such building or premises is allowed for shops under this clause the following uses may be permitted.
  - (i) Any use permitted in Residential Zone;
  - (ii) Stores of shops for the conduct of retail business;
  - (iii) Branch offices of banks, professional offices, local offices of any public created by law;



- (iv) Hair dressing saloon and beauty parlours;
- (v) Shoe repairing and shining shops;
- (vi) Laundry and tailoring shops not employing more than 5 persons;
- (vii) Shops for goldsmith, watch and clock repairs and picture framing;
- (viii) Radio and household appliances repair and umbrella repairs( not employing more that 5 person);
- (ix) Tea stalls, restaurants and eating house;
- (x) Uses permissible under (a),(b),(c),(d),(f),(g),(h),of clause 5.2.1.B

**11.5.2.1.D.** Use prohibited- All other uses not specifically permitted herein

### **11.5.2.2 : REGULATIONS FOR COMMERCIAL ZONES**

**11.5.2.2.A.** Use permitted-

- (a) Shops of all kinds, business offices and exchanges;
- (b) Whole sale establishments and departmental shores;
- (c) Auto supply stores and showrooms for motor vehicles and machineries;
- (d) Storage of furniture and household goods;
- (e) Club houses or other recreational activities conducted as business;
- (f) Place of amusements of assembly;
- (g) Temples, churches, Mosques and other places of worship;
- (h) Schools and other institutions, libraries, museums and art galleries;
- (i) Dispensaries, Clinics and veterinary dispensaries and hospitals;
- (j) Police out-post and telegraph offices and fire stations.
- (k) Local offices of any public authority created by law and professional office
- (l) Banks and safe deposit vaults;
- (m)Municipal, State or Central Government uses but not offices;
- (n) Hostels, boarding and lodging houses, eating houses;
- (o) Printing press, book binding and block making aggregate motive power not exceeding 5 H.P. and not employing more that 5 persons;
- (p) Cleaning and dying establishment;
- (q) Carpentry and cane making and retailing of building materials;
- (r) All other uses permitted under clause 5.2.1. A and under (a),(b),(c),(d),(f),(h),(j),(k),(i) of clause 5.2.1. B and all uses under clause 5.2.1.C;
- (s) Accessory building or uses customarily incidental to any permitted principal use including storage space upto 50 percent of the total floor area use for the principal use;

**11.5.2.2. B.** Uses permissible on appeal to the Authority-

- (a) All types of industries that are permitted in Residential area;
- (b) Petrol filling stations and kerosene storage;
- (c) Electric sub-stations;
- (d) Coal, wood and timber yards;



- (e) Motor repairing garages;
- (f) Repair, cleaning, printing or light manufacturing using not more than 10 H.P. motive power in total and employing not more than 5 persons;
- (g) Wholesale godown and warehouses;
- (h) Taxi, bus and truck parking area;

**11.5.2.2. C. Use prohibited-** All other uses not specifically permitted herein.

### **11.5.2.3. REGULATION FOR LIGHT INDUSTRY ZONE**

**11.5.2.3. A. Use permitted-**

- (a) Warehouses and godowns;
- (b) Coal, wood and timber yards;
- (c) Contractors plant and storage for building materials;
- (d) Bakeries, confectioneries, ice-cream factories;
- (e) Automobile service and repairing stations with motive power not exceeding 20 H.P. provided the necessary parking space are available;
- (f) Power laundries;
- (g) Pasteurization of milk, cream and butter;
- (h) Mechanical workshop with lathes, drills, grinders, spot welding set with motive power not exceeding 20 H.P.
- (i) Printing, book binding, engraving and block making;
- (j) Photo process, embroidery and lace manufacturing cotton and silk printing, arts and crafts, toy making glass cutting etching and polishing, costumes, jewellers and novelties,
- (k) Suphari and Machola grinding, cold storage, metal polishing, travel goods, and canvas and water proof materials, steel slates, wowing machines(Assembly),writing ink employing not more than 10 persons;
- (l) Handloom weaving wooden packing cases and boxes, was products wooden industrial goods, bucket and metal container animal feed;
- (m) Iron rolling and wire setting with motive power not exceeding 20 H.P.;
- (n) Atta chakki, oil mills and flour mills with a motive power not exceeding 75 H.P.;
- (o) Bus and truck terminal and parking plots;
- (p) Any other use in commercial zone except those specially prohibited hereunder;
- (q) Accessory buildings or uses customarily incidental to any permitted principal use.

**11.5.2.3.B. Use permissible on appeal to the authority-**

- (a) Leather products;
- (b) Fruits and vegetable canning and preservation;
- (c) Saw milling;
- (d) Light manufacturing, railings and grills manufacturing;
- (e) Petrol Filling stations;
- (f) Watchmen or caretakers;
- (g) Canteen and eating house serving the industries;
- (h) All other light industries as defined by the Authority not involving any danger or fire, explosion, noise, vibration; smoke, dust, odour; heat or other objectionable effluents;

**11.5.2.3.C. Use prohibited-**

- (a) All uses not specially permitted herein;
- (b) The industries associated with undesirable features such as excessive smoke, stench, injurious fumes, effluents and other hazards to health and safety of the people.

**11.5.2.4. REGULATION FOR MEDIMUM INDUSTRY ZONE-**

**11.5.2.4.A.** Use permitted-All uses permitted or permissible on appeal to the Authority in light industry zone.

**11.5.2.4.B.** All other Medium Industries except those specially prohibited hereunder.

**11.5.2.4.C.** Use prohibited- the industries associated with undesirable features such as, excessive smoke stench, injurious fumes effluents and other hazard and safety of the people.

**11.5.2.5. REGULATION FOR PUBLIC AND SEMI-PUBLIC ZONE-****11.5.2.5.A. Use permitted-**

- (a) State and Central offices and other public and semi-public buildings;
- (b) Educational and research institution;
- (c) Social, Culture and religious institutions;
- (d) Local and municipal offices;
- (e) Public utilities and municipal facilities;
- (f) Museums, monuments, art galleries, community halls, libraries;
- (g) Building and uses incidental to the above permitted uses.

**11.5.2.5.B :** Use permissible on appeal to the Authority-

- (a) Residences;
- (b) Restaurants, milk bars;
- (c) Any other uses incidental to main use and in no way causing any nuisance or hazard;
- (d) Radio and wireless stations.

**11.5.2.5.C.** Use prohibited- All other uses not specifically permitted herein.

**11.5.2.5.D.** The minimum size of the plot for the public and semi-public zone shall be 5760 sq.ft. or 537.68 sq.m. and the maximum coverage shall be 50 percent of the total plot area.

**11.5.2.6 REGULATIONS FOR RECREATIONAL AND OPEN SPACE ZONE.****11.5.2.6 A :** Use permitted-

- (a) All public and semi-public recreational use including parks, play grounds, park ways and other special recreational uses;
- (b) Stadium;
- (c) Swimming pools and clubs;
- (d) Botanical and zoological parks;

**11.5.2.6.B** Use permissible on appeal to the Authority-

- (a) Restaurants and selling of eatables;
- (b) Public utilities and municipal facilities;
- (c) Use clearly incidental
- (d) Uses for temporary public entertainment purposes for a period not exceeding 30 days. Structure that may be erected for such entertainment purposes shall be removed at the end of the period and shall in no case be permanently erected.

**11.5.2.6.C.** Use prohibited –All uses not specifically permitted herein;

**11.5.2. 6.D.** The height limitations of any structure of building if permitted under this clause front space, side and rear yard within this zone shall be determined by the Authority.

**11.5.2.7 REGULATIONS FOR GREEN BELT ZONE.****11.5.2.7. A.** Use Permitted-

- (a) All agricultural uses and horticulture;
- (b) Gardens and forestry;
- (c) Golf links and club houses;
- (e) Public and private parks, play fields, summer camps or recreation of all types;
- (f) Farm house and their accessory buildings and their uses.
- (g) Churches, temples, mosques and other places of worship;
- (h) Processing and sale of farm products on the property where produced, the servicing and repair of farm machineries and the sale of agricultural supplies.



**11.5.2.7.B Use permissible on appeal to the Authority-**

- (a) Milk chilling stations and pasteurizing plants;
- (b) Rural colleges, boarding houses and hostels, scientific and industrial research laboratories not to be operated for productions of good or other materials.
- (c) Cottage industries, brick making excavation of clay, gravel top soil and other earthen materials;
- (d) Landing fields for planes and helicopter and its necessary appurtenances;
- (e) Utilities and their building;
- (f) Area needed for defence purposes;
- (g) Wireless transmitting and weather stations;
- (h) Any irrigation or flood control works;
- (i) Cemeteries, crematorium and burial grounds;
- (j) In case of existing villages in this zone the normal expansion of the village including rural housing, community facilities and other service facilities would be allowed upto a physical boundary to be fixed by the authority.

**11.5.2.7.C. Use prohibited –**

- (a) All uses not specifically permitted herein.
- (b) The parceling out of land in this zone for the purposes of urban housing shall be absolutely prohibited.

**11.5.2.7.D.** Customary home occupation shall be conducted only by a person resident in the dwelling, the area for such uses shall not exceed 25 percent of the total floor area of the dwellings, and there shall be no public display of goods.

**11.6 EXCEPTIONS AND MODIFICATIONS****11.6.1. Exceptions to height yard and set back limits.**

**11.6.1.1.** The height limitations of these regulations shall not apply to temples, Churches and mosques provided that the minimum front and rear set back etc. are maintained.

**11.6.1.2.** Chimneys, elevators, poles, spires, overhead water tanks and other such projections not used for human occupation on appeal the authority.

**11.6.1.3.** Stops, gallery or balcony, weather frame; sun breaker; cornice, caves, window sills; or other ornamental projections may project onto any yard provided this will not reduce the required open spaces in the front sides and rear as prescribed in these regulations on appeal to the authority.

**11.6.1.4.** In any zone, on plots less than 60ft. or 18 metres deep the rear yard may be reduced by one percent of each foot or 30.48c.m. if the plot depth is less than 60 ft. or 18 metres.

**11.6.1.5.** Notwithstanding anything contained in these regulations the front set back in any zone can be prescribed by the authority in pursuance of any scheme. **11.6.1.6.** Height of compound wall in all zones specified in these regulations shall not exceed 6 or 1.8 m. above the ground level of the adjacent street.

#### **11.6.2 GROUP PROJECTS**

**11.6.2.1.** In case of group Housing Projects containing a group of twenty or more buildings, notwithstanding anything contained in the regulations, the Authority may prescribe special requirements in harmony with the character of the neighbourhood and ensure that the total open spaces shall not be less than four acres or 1.62 hectares per thousand populations.

**11.6.2.2.** The minimum area for the development of group housing is one acre. Set back arrangement of blocks, garages etc. will have to be approved in each case so that a healthy development is ensured. The coverage and F.A.R. for various densities will be as per regulation of Residential use zone.

**11.6.2.3.** Group projects for commercial, light and medium industry zones can be undertaken and notwithstanding anything contained in these regulations, the Authority may prescribe special requirements in consistent with the character of the zone.

#### **11.7 : ADMINISTRATION AND ENFORCEMENT.**

**11.7.1.** Approved of plans for Zoning Conformity - After the adoption of the Master Plan and the Zoning Regulations by the State Government no person shall use, sub-divide or develop any land or erect, re-erect materially alter or change the existing structure of any building or use the building or land within the limit of Bokajan Master Plan area without the plans being approved for Zoning conformity by the Authority as required under Section 13 of the Assam Town and Country Planning Act. 1959( as amended).

**11.7.2.1.** Application for approval of Zoning conformity – All application for approval of zoning conformity and for erection re-erection renovation and material alteration of any building or structure shall be accompanied by the following plans in triplicate –

- (a) A block plan of such building site which shall be drawn to the scale of the largest revenue survey maps at the time in existence for the locality and shall show the position and appurtenances of the properties, if any, immediately adjoining streets and the means of access to the building;
- (b) A site plan on 16 ft. or 2 metre scale indicating the plot boundaries the north line position of the existing structures if any, line plan of the proposed structure



with its location, set-backs, side and rear yard; projections if any distances from any structure if any, etc. on plot in figured dimensions;

- (c) The detailed floor plan for each floor on 8 ft. or 1 metre scale with projections if any, showing the use of every room or portions of the building or structure and full and detail dimensions of the structure;
- (d) One or two sections, as the case may be through the building showing the height of the plinth above and below the ground level and each floor and of the roof over the staircase;
- (e) Such other matters as may be necessary to determine conformance with and provide for the enforcement of these regulations;
- (f) All the plans and sections shall be signed by the applicant;

**11.7.2.2.** In case of plans pertaining to erection, re-erection or material alteration of any building or structure the Authority may either approve or refuse to approve the plans if it is not in conformity with the Master Plan or Zoning Regulation and shall communicate its decision to the applicant giving the notice within a period of one month from the receipt of the application or such other information as may be called for by the Authority. One copy of the plans shall be returned to the application after the Authority have marked such copy either as approved or disapproved and attested to the same by the signature of the proper official as designated by the Authority. The other two copies of the plans similarly marked, shall be retained by the Authority.

**11.7.2.3.** For the purpose of obtaining permission for sub-division of any plot of land the applicant shall submit the following plans in triplicate together with necessary statements to the Authority-

- (a) A block plan of such land which shall be drawn to the scale of largest revenue survey map at the time in existence for the locality showing the location of the land, boundaries of the proposed land shown on the map and sufficient description to define the same, location, name and present widths of the adjacent roads and major physical characteristics of the land proposed to be sub-divided, including topography, the location and width of any water course and location of any area subject to inundation or flood and north line;
- (b) A plan of such land which shall be drawn to a suitable scale showing the complete layout of the proposed sub-division including location and widths of all the proposed streets dimension, and uses of all plots, location of all drains, Sewerage and other utilities, building lines permissible and northline;
- (c) Any other items of information which may be required by the Authority from time to time;
- (d) All the plans shall be signed by the applicant.



11.7.2.4. In case of plan pertaining to sub-division of land, the authority may either grant or refuse the approved of the plans or may approve them with such modifications as it may deem fit and thereupon shall communicate its decision to the applicant giving the notice within three months from the date of receipt of the application or such other information as may be called for by the Authority.

**11.7.3. Sub-Committee on Zoning Appeals-**

11.7.3.1. Sub-Committee shall be constituted from out of the members of the Authority by the Chairman and if no Authority is constituted in such cases by the Director of Town and Country Planning which shall be called the “Sub—committee on Zoning appeals”.

11.7.3.2. The Sub-committee shall consist of at least five members. The Chairman of the Authority and the Director of the Town and Country Planning or his nominee and three other members from the local Authorities representing private sector shall be the members subject to the approval of the Government. The Chairman presides over such meetings and the quorum consists of at least three members. The Sub-committee shall meet one a months to consider any case of Zoning Appeals.

Where no Authority is constituted, the Director, of Town and Country Planning or his nominee and Deputy Commission and three other members from the local Authorities or representing private sector or both shall be the members.

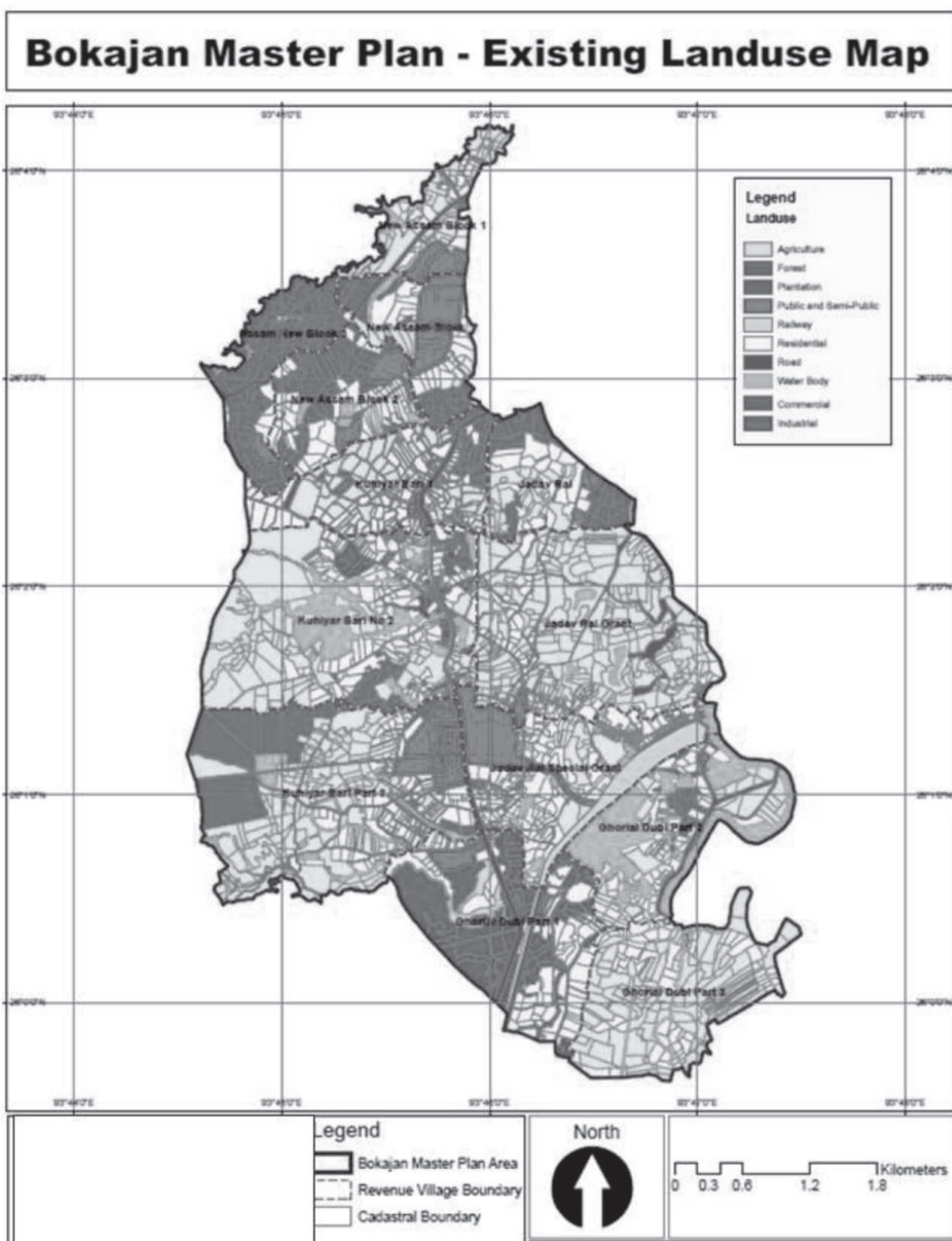
The Deputy Commission or in his absence the Director of Town and Country Planning or his nominee shall preside over such meeting.

11.7.3.3. The Chairman and where no Authority is constituted the Director of Town and Country Planning or his nominee shall convene the meeting of the sub-committee on Zoning Appeals.

11.7.3.4. This sub-Committee shall have the power to grant variance with respect to front, rear and side yard or building height and area requirements, if at the time of adoption of these Regulations a plot of land is smaller than the minimum size specified for the land in which it is located, and compliance with front, rear side yard and height and area regulations is not feasible because of topography or other special consideration, the case may be brought before the sub-committee on Zoning appeals. This Sub-committee can grant variance and permission given with such modifications as are necessary but should conform as closely as possible to the requirements specified for zone in which the plot is located. In all, the particulars reasons for the variance should be recorded by the sub-committee.

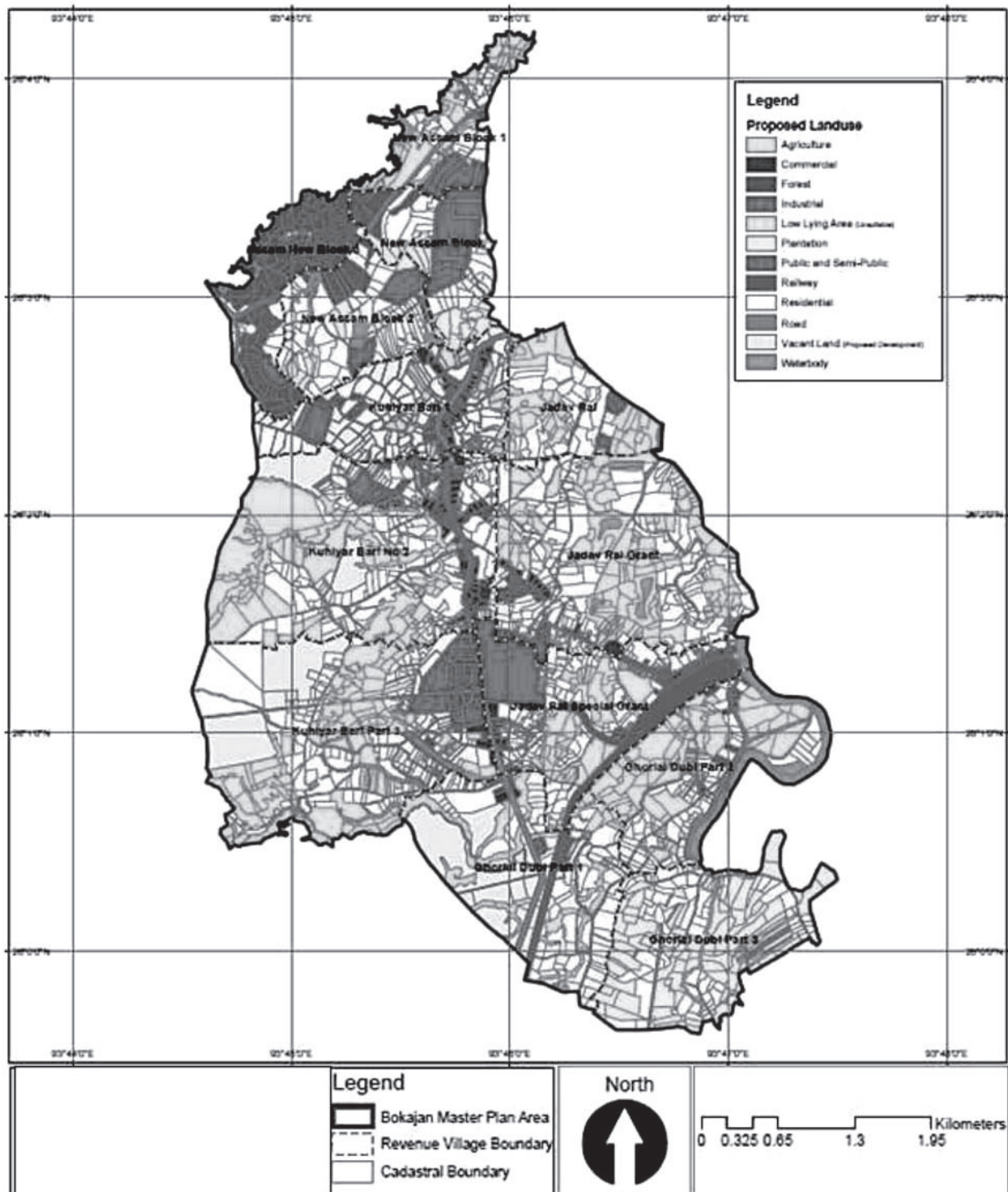
11.7.3.5. The Sub-committee on Zoning Appeals shall not have the power however to grant use variance. Where a change of use other than that specified in the zone in which the plot is located is permitted.

**11.7.3.6. Penalties-**Every person, firm body or corporation the commits or knowingly permits a breach of any specified provisions of the Bokajan Master Plan and schemes prepared there under and foregoing Zoning Regulations or who neglects or fails to comply with any such provisions, shall be punishable as provided in the Assam Town and Country Planning Act' 1959 (as amended)

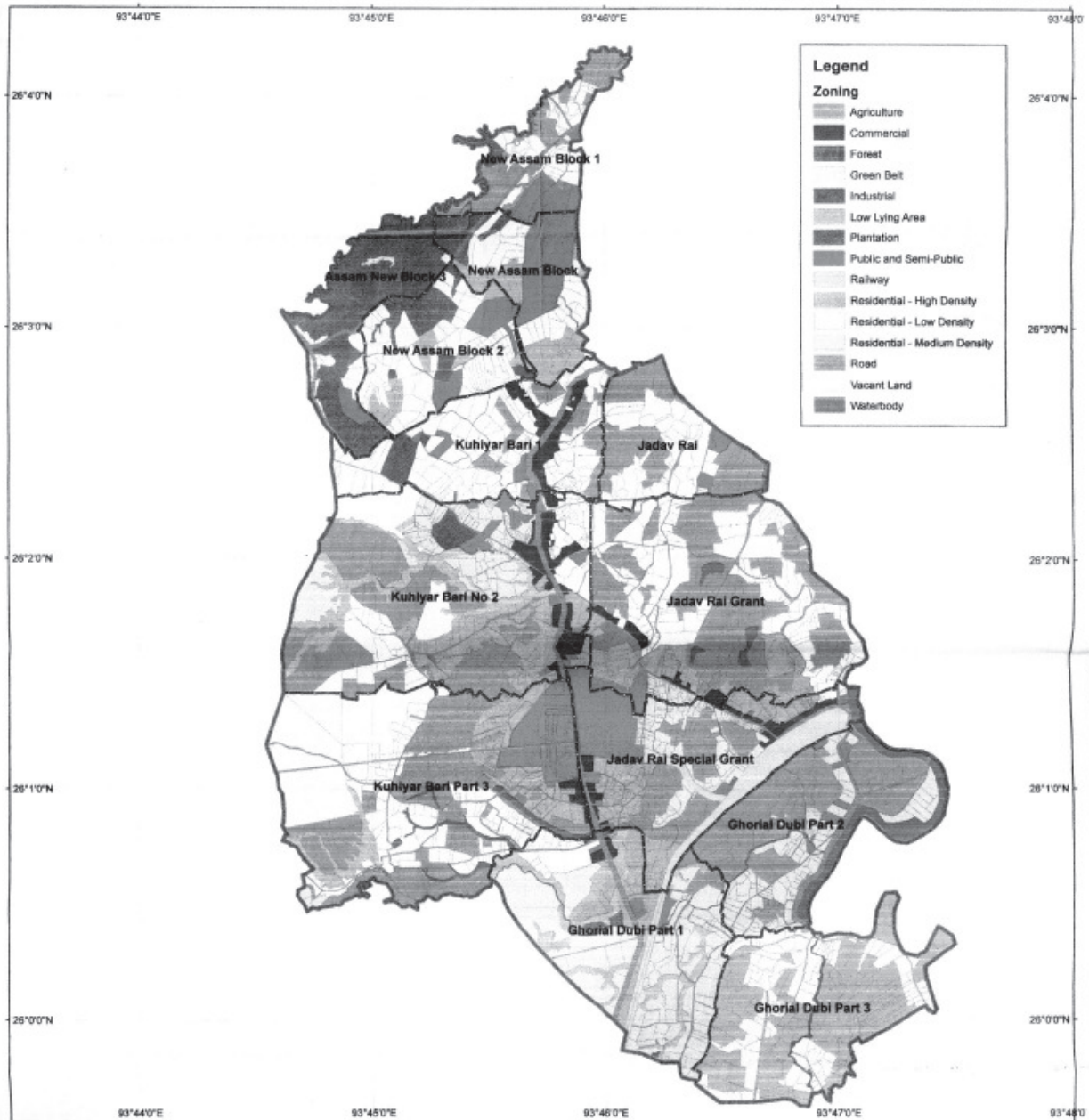




## Bokajan Master Plan - Proposed Landuse Map



# Bokajan Master Plan - Proposed Zoning Map



## Legend

### Zoning

- Agriculture
- Commercial
- Forest
- Green Belt
- Industrial
- Low Lying Area
- Plantation
- Public and Semi-Public
- Railway
- Residential - High Density
- Residential - Low Density
- Residential - Medium Density
- Road
- Vacant Land
- Waterbody

## Key Map:



## Legend

- Bokajan Master Plan Area
- Revenue Village Boundary
- Cadastral Boundary

## North



0 0.325 0.65 1.3 1.95 Kilometers

PREPARED BY:

PLANNING COLLABORATIVE,  
Design and Planning Consultants  
Dwarka Nagar,  
Guwahati, Assam



## Bokajan Master Plan - Base Map

